En Instruction Manual

Es Manual de instrucciones

SAVAGE X 4.6 Big Block

GIANT 1/8 SCALE 4WD MONSTER TRUCK

TOUGHER
STRONGER
FASTER

HPI RACING

Thank you

Thank you for selecting the HPI Racing Savage X RTR! This kit is designed to be fun to drive and uses top quality parts for durability and performance. The instruction manual you are reading was designed to be easy to follow yet thorough in its explanations. HPI Racing wants you to enjoy driving your new Savage X RTR. If you come across any problems or need some help getting through a step, give us a call and we will do our very best to help you. You can also contact us on the internet at www.hpiracing.com.

The caution or attention symbols will warn you about steps that can be very dangerous. Please read and understand the instructions carefully before proceeding.

Caution — *Failure to follow these instructions can damage your kit, and cause serious bodily injury or death.*

Attention — *Failure to follow these instructions can cause injury to yourself or others. You might also cause property damage or damage your kit.*

⚠ Caution

To prevent any serious personal injury and/or damage to property, please be responsible when operating all remote controlled models. Extra attention is called for when operating any glow fuel powered model. These models can exceed speeds of 30 m.p.h. and use highly poisonous and flammable fuels.

Before Running
- ***Please read manual (with parent, guardian or a responsible adult if necessary).***

While Operating
- ***Please do not run on a public street, this could cause serious accidents, personal injuries and/or property damage.***
- ***Please do not run near pedestrians or small children.***
- ***Please do not run in small or confined areas.***

Before Operating
- ***Make sure that all screws and nuts are properly tightened.***
- ***Always use fresh batteries for your transmitter and receiver to avoid losing control of the model.***
- ***Make sure no one else is using the same radio frequency as you are using.***
- ***Please confirm the neutral throttle position.***

After Running
- ***Shut off engine first, then turn off receiver switch and turn off transmitter last.***
- ***After running Savage X RTR, it is necessary to perform routine maintenance. Failure to do this can result in increased wear and damage to the engine and chassis.***

Heat, Fire, and Fuel Safety
- ***Never use gasoline in a glow engine. Use glow fuel specifically designed for model car engines.***
- ***Do not run near open flames or smoke while running your model or while handling fuel.***
- ***Always store fuel in a well ventilated place, away from heating devices, open flames, direct sunlight, or batteries. Keep glow fuel away from children.***
- ***Glow fuel is flammable and poisonous. Glow fuel powered model engines emit poisonous vapors and gasses. These vapors irritate eyes and can be highly dangerous to your health.***
- ***Be aware that some parts will be hot after operation. Do not touch the exhaust or the engine until they have cooled.***

Gracias

Gracias por elegir el Savage X RTR de HPI. Este kit a sido diseñado y fabricado con los mejores materiales para lograr la máxima diversión y una gran resistencia . Este manual de instrucciones le servirá como guía para facilitarle el uso y mantenimiento del modelo. HPI Racing quiere que usted disfrute conduciendo su nuevo Savage X RTR. Si tiene cualquier problema al seguir estas instrucciones no dude en llamarnos o en visitar nuestra web www.hpiracing.com

The caution or attention symbols will warn you about steps that can be very dangerous. Please read and understand the instructions carefully before proceeding.

Caution — *Failure to follow these instructions can damage your kit, and cause serious bodily injury or death.*

Attention — *Failure to follow these instructions can cause injury to yourself or others. You might also cause property damage or damage your kit.*

⚠ Precauciones

Para evitar posibles daños a las personas o las propiedades, sea responsable cuando use un modelo de Radio control. Es necesario prestar una mayor atención cuando se trata de modelos propusaldos por motores de gasolina. Este tipo de modelos alcanzan velocidades cercanas a los 50 km/h. y utilizan combustibles tóxicos y altamente inflamables.

Antes de rodar:
- ***Lea el manual con atención (con un adulto si es necesario)***

Durante el uso;
- ***No ruede en calles abiertas, puede causar accidentes graves y daños a personas y/o propiedades.***
- ***No ruede cerca de peatones o niños pequeños.***
- ***No ruede en lugares pequeños o cerrados.***

Antes de usarlo;
- ***Compruebe que todos los tornillos y tuercas están correctamente apretados***
- ***Use siempre baterías en buen estado en su emisor y receptor para asegurar un correcto control del modelo.***
- ***Asegúrese de nadie utiliza su misma frecuencia.***
- ***Compruebe que el acelerador esta en neutro (relenti)***

Después de rodar:
- ***En primer lugar pare el motor a continuación el receptor y por ultimo el emisor.***
- ***Después de rodar con el Savage X RTR es necesario realizar el mantenimiento. Un mal mantenimiento provoca desgastes prematuros y puede dañar el motor o el chasis.***

Precauciones de seguridad:
- ***No use jamás gasolina en un motor glow. Use siempre combustible para modelismo.***
- ***No ruede o manipule el combustible cerca de llamas , fuentes de calor o mientras fuma.***
- ***Guarde siempre el combustible en lugares ventilados, lejos del calor,luz solar o baterías. Manténgalo lejos de los niños.***
- ***El combustible glow es inflamable y tóxico. Los motores emiten gases tóxicos. Los gases pueden irritar los ojos o ser perjudiciales.***
- ***Tenga cuidado ya que algunas partes están calientes al finalizar el uso. No toque el escape o el motor hasta que se haya enfriado.***

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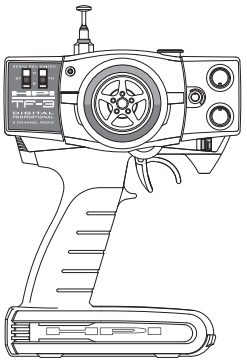
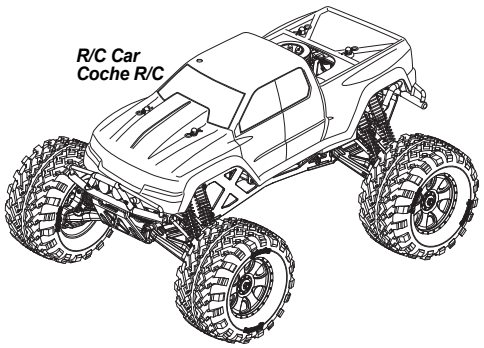
Components
Componentes

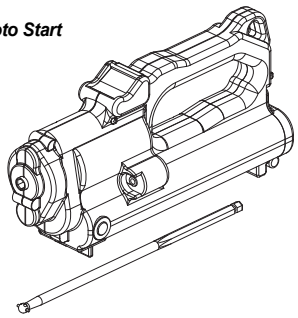
Transmitter
Emisor



R/C Car
Coche R/C



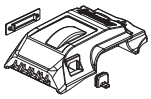
Roto Start



Parts Bag Bolsa de piezas

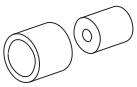
Z150
Antenna Pipe
Tubo de antena

Radio Box Parts
Partes caja radio

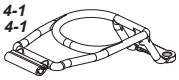


Battery Case
Porta baterías

Air Filter Element
Filtro aire



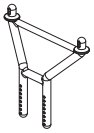
Engine Guard
Protector motor
See Section 4-1
Vea sección 4-1



Inner Cone
Cono escape
See Section 3-9
Vea sección 3-9

Clutch Bell
Campana embrague
See Section 3-10
Vea sección 3-10

Body Mount
Soporte carrocería
See Section 5-3
Vea sección 5-3

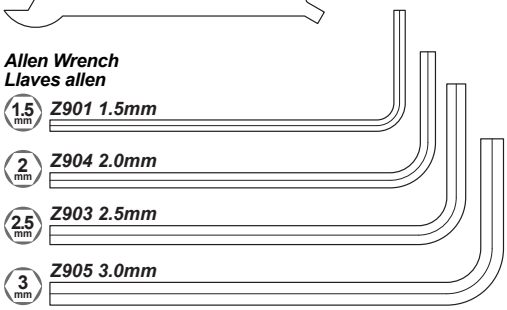


6154
Nylon Strap
Brida nylon

Included Tools Herramientas incluidas

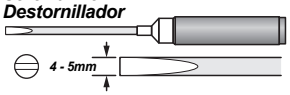
Z960
Turnbuckle Wrench 4mm / 5.5mm
Llave tirantes 4mm/5.5mm

Allen Wrench
Llaves allen



Equipment Needed
Material necesario

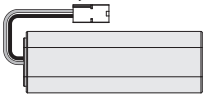
Screwdriver
Destornillador



AA Alkaline Batteries
Baterías alcalinas AA

74151
HPI Racing Temp Gun
Termómetro HPI Racing

2029 (US,JP)
Battery Pack 7.2 Volt
Batería 7,2v

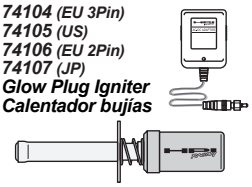


HB70452
Charger for Battery Pack 7.2 Volt
Cargador baterías 7,2v

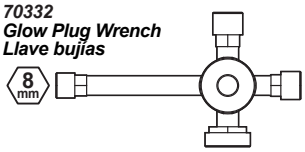
This charger is powered by a standard 12V lighter socket. This charger designed for Ni-MH battery.

Este cargador funciona a 12v. Lleva un conector standard de mechero de coche. Esta diseñado para baterías Nimh.

74104 (EU 3Pin)
74105 (US)
74106 (EU 2Pin)
74107 (JP)
Glow Plug Igniter
Calentador bujías



70332
Glow Plug Wrench
Llave bujías



9067
Fuel Bottle
Botella combustible

We recommend that you use fuel containing 20-25% nitro glow fuel.
Recomendamos utilizar combustible con un 20/25 % de Nitrometano

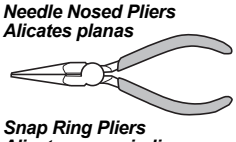
20% - 25%

74318/74348 (US)
38704/38705 (JP)
Glow Fuel
Combustible glow

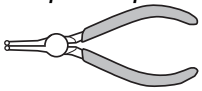
Necessary for maintenance
Material para mantenimiento

Screwdriver
Destornillador

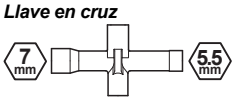
Needle Nosed Pliers
Alicates planas



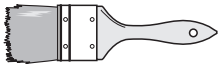
Snap Ring Pliers
Alicates para circlips



Z950
Cross Wrench
Llave en cruz



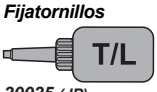
Brush
Pincel



Rag
Trapo

Z164
Grease
Grasa

Thread Lock
Fijatornillos



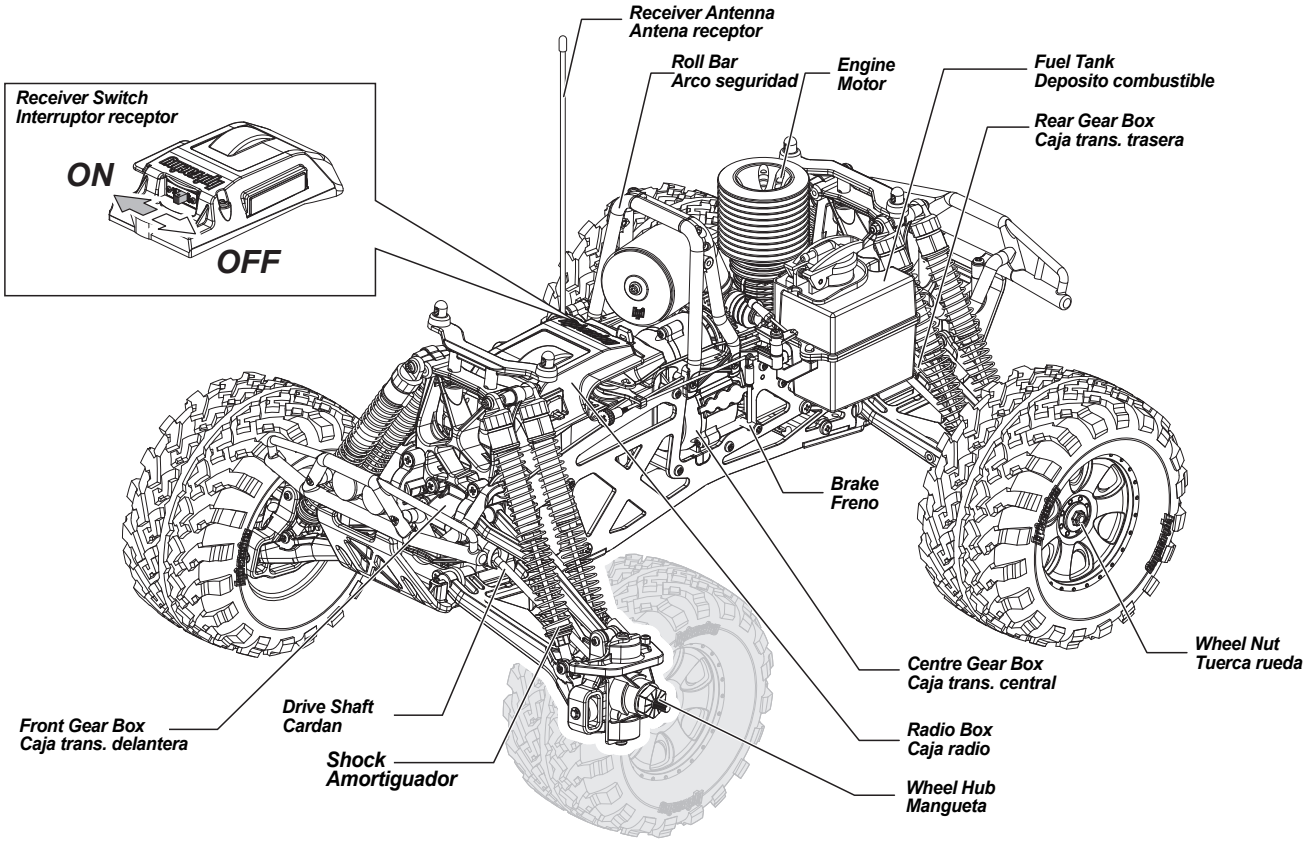
30035 (JP)
Instant Cement
Pegamento instantáneo

Z190
Air Filter Oil
Aceite filtro aire

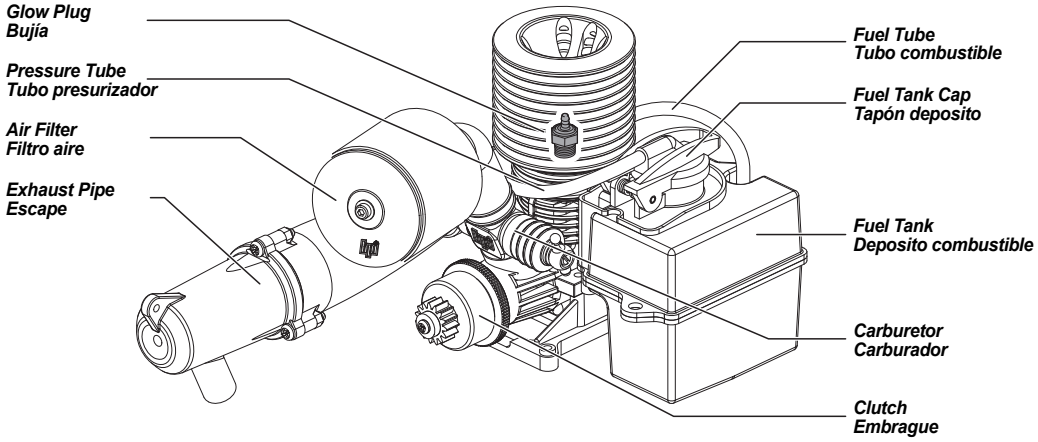
39014 (JP)
Oil Spray
Aceite en spray

9062 (US,EU)
9063 (JP)
Nitro Car Cleaner
Spray limpiador

Chassis Details
Detalles chasis



Engine Details Detalles motor



Caution
Cuidado

Do not run on public streets or highways. This could cause serious accidents, personal injuries, and/or property damage.

No ruede en calles o carreteras. Puede causar accidentes, daños a personas y/o propiedades.

Make sure everyone is using a different frequency (See section 3-5) when driving together in the same area.

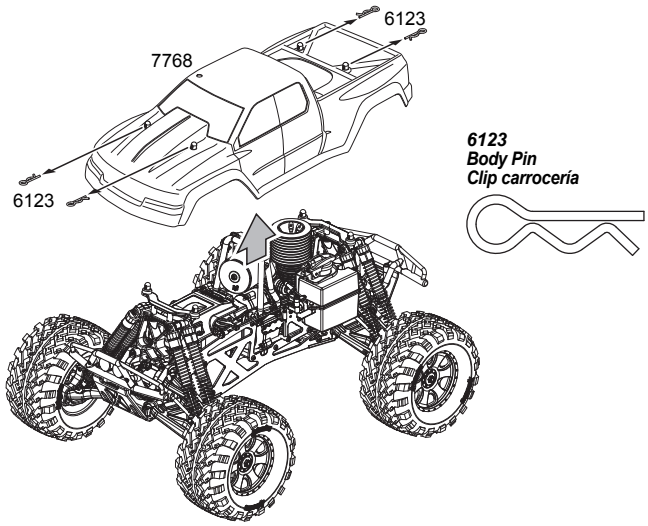
Asegúrese que usa una frecuencia diferente al resto de usuarios cercanos (vea sección 3-5)

2 Start Up Guide
Guía de puesta en marcha

Please read the instructions before running.
Por favor lea las instrucciones antes de rodar.

2-1 Preparation for Running
Preparación para rodar

Body Removal Retire la carrocería



6123
Body Pin
Clip carrocería

Receiver Battery Baterías receptor

4x *AA Alkaline Batteries*
Baterías alcalinas AA

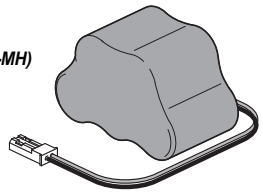
Attention Atención

! *Only use alkaline batteries in the receiver.*
En el receptor use solo baterías alcalinas

Optional Battery Batería opcional

For extended running, we recommend #2012 Hump Battery Pack.
Para una mayor autonomía, recomendamos usar el Pack opcional ref 2012

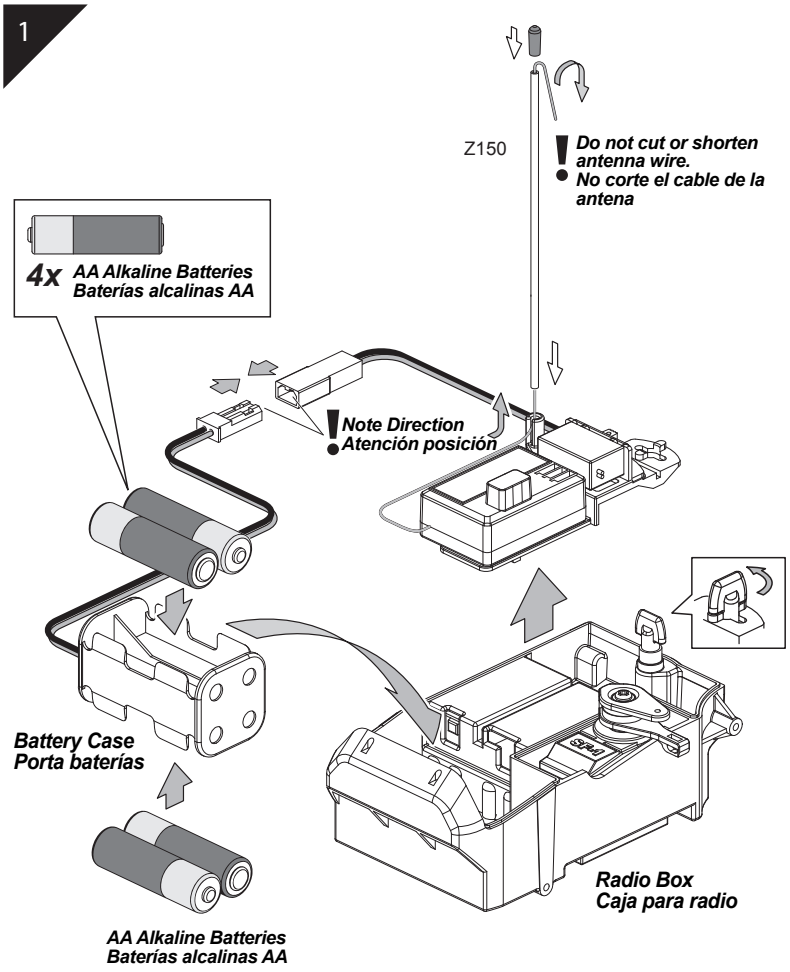
2012
Hump Battery Pack For Receiver (6V 1200mAh/Ni-MH)
Pack opcional para receptor (6v 1200mAh/Ni-Mh)



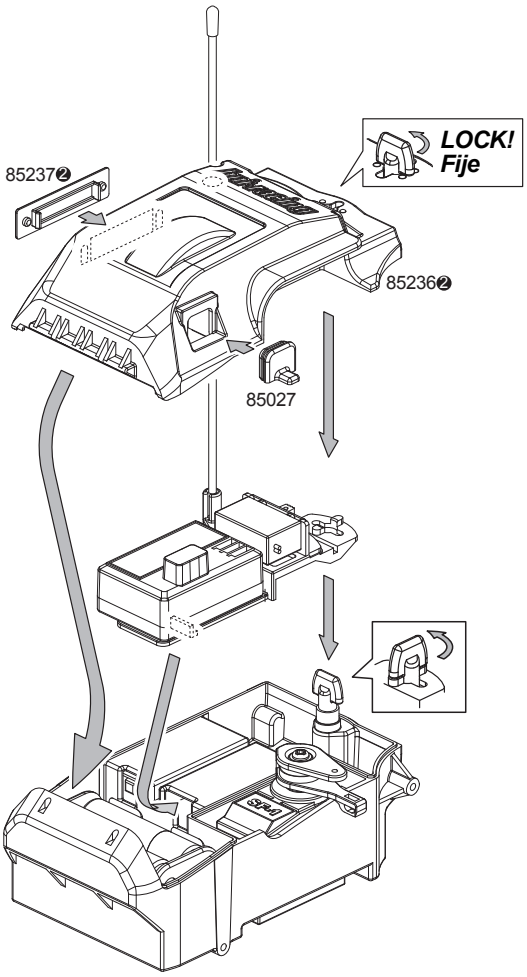
Receiver Battery Installation Instalación batería receptor

Connect and install receiver batteries, then uncoil antenna wire, and pull antenna wire through hole in battery cover. Secure the battery cover and install antenna pipe.
Coloque y conecte las baterías, a continuación pase el la antena por el tubo y colóquela en su emplazamiento. Cierre la caja de baterías y coloque la antena.

1



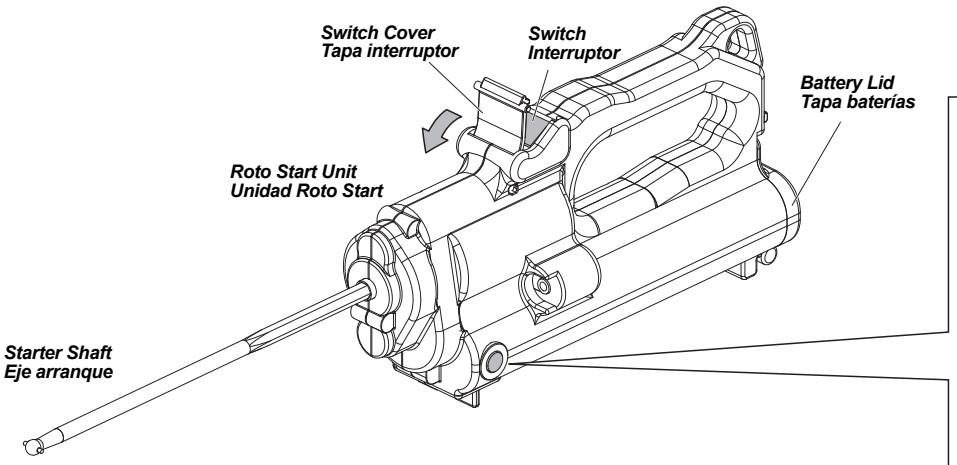
2



2-2 HPI Roto Start System Preparation
Preparación sistema Roto Start HPI

Roto Start makes engine starting easier. You must charge the battery before use.
El Roto Start facilita el arranque del motor. Cargue la batería antes de cada uso

Roto Start Details Detalles Roto Start



Circuit Breaker
Corta corriente

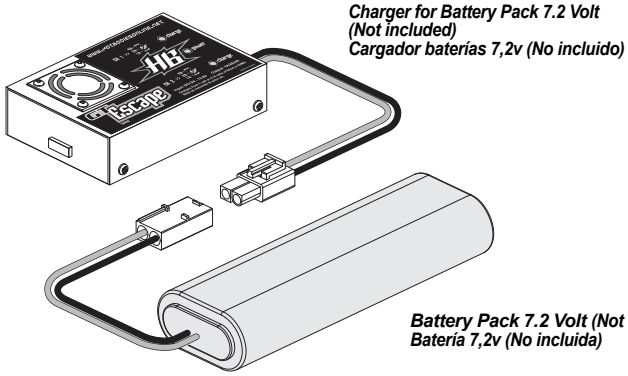
ON ***OFF***

If engine locks, the circuit breaker will stop the Roto Start. Remove Roto Start and check engine for flooding or damage. If there is no problem with the engine, reset the circuit breaker by pushing the button and try to start the engine again.

Si el motor se bloquea el corta corriente detiene el Roto Start. Retire el Roto Start y compruebe que el motor no este ahogado o dañado. Si el motor esta en buen estado , pulse el botón y vuelva a intentarlo.

Roto Start Battery Charging Cambio batería Roto Start

Only use charger designed for 7.2Volt battery pack.
Use solo cargadores específicos para baterías 7,2v


Charger for Battery Pack 7.2 Volt
(Not included)
Cargador baterías 7,2v (No incluido)
Battery Pack 7.2 Volt (Not included)
Batería 7,2v (No incluida)

Caution Cuidado

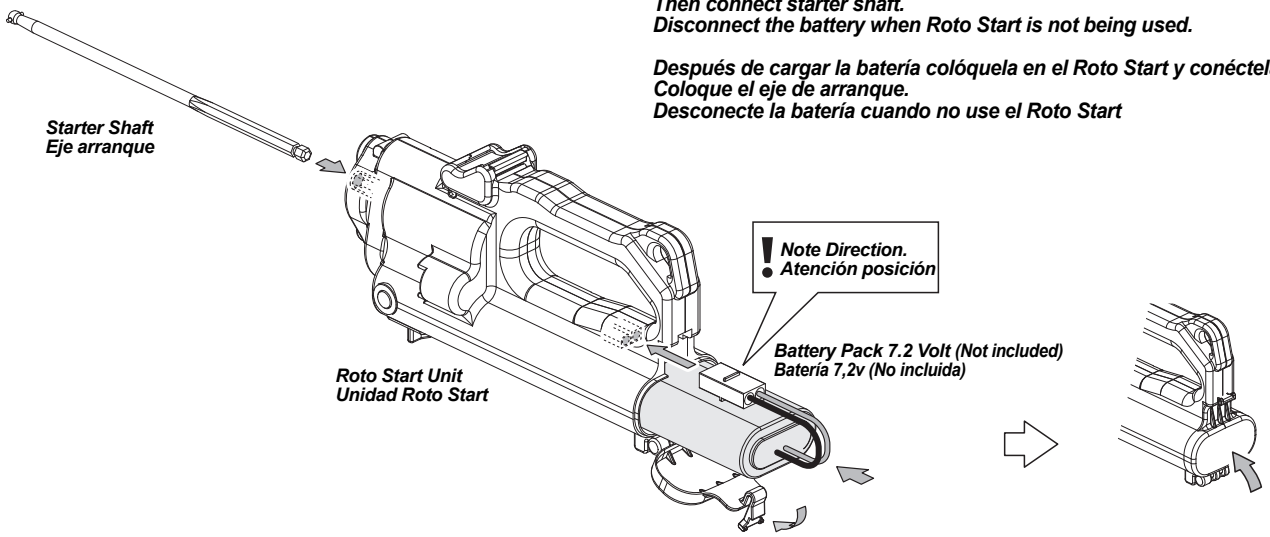
Do not use Nickel Cadmium battery charger for Nickel Metal Hydride batteries. If you do not use the special charger for Nickel Metal Hydride batteries, The batteries will be damaged.

No use un cargador para baterías de Níquel Cadmio para cargar las de Níquel Metal Hidruro. Si no usa un cargador especifico para Ni-Mh las baterías pueden estropearse.

Battery Installation Instalación baterías

After charging the battery, insert into Roto Start and connect the battery.
Then connect starter shaft.
Disconnect the battery when Roto Start is not being used.

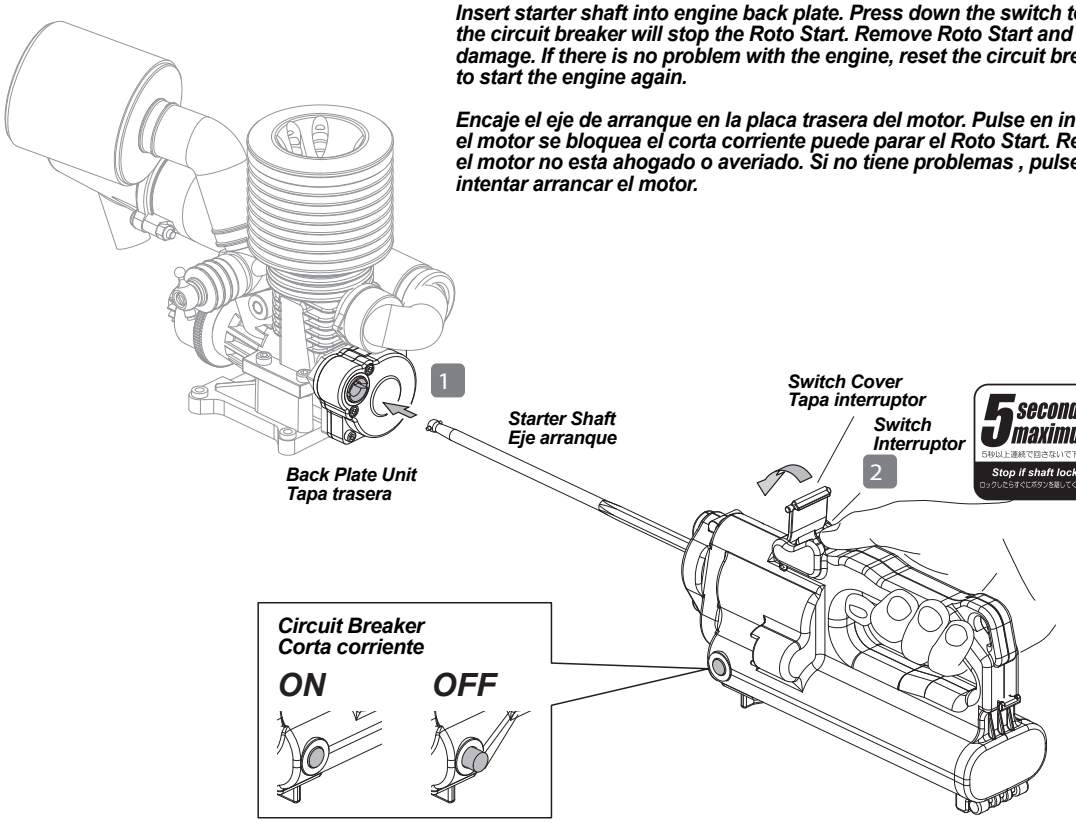
Después de cargar la batería colóquela en el Roto Start y conéctela.
Coloque el eje de arranque.
Desconecte la batería cuando no use el Roto Start



How to Use Roto Start Como utilizar el Roto Start

Insert starter shaft into engine back plate. Press down the switch to crank the engine. If engine locks, the circuit breaker will stop the Roto Start. Remove Roto Start and check engine for flooding or damage. If there is no problem with the engine, reset the circuit breaker by pushing the button and try to start the engine again.

Encaje el eje de arranque en la placa trasera del motor. Pulse en interruptor para arrancar el motor. Si el motor se bloquea el corta corriente puede parar el Roto Start. Retire el Roto Start , compruebe que el motor no esta ahogado o averiado. Si no tiene problemas , pulse el corta corriente y vuelva a intentar arrancar el motor.



Do not use the Roto Start continuously for more than 5 seconds at a time. Using the Roto Start for longer than 5 seconds will cause damage.

No utilice el Roto Start mas de 5 segundos cada vez que intente arrancar. Si lo usa mas tiempo puede causarle averías.

2-3 Glow Plug Igniter Preparation
Preparación calentador bujías

Glow plug igniter is necessary for starting nitro engine. These items are not included with your kit. They must be purchased separately. Follow the instructions included with your glow plug igniter and charger. If the glow plug igniter is not fully charged, the engine will not start.

El calentador de bujías es necesario para arrancar un motor glow. Estos accesorios no están incluidos en su kit. Debe comprarlos por separado. Siga las instrucciones de su calentador de bujías. Si el calentador de bujías no esta completamente cargado el motor no arrancara.

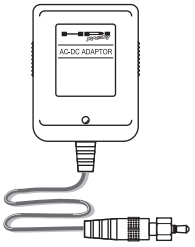
Remove glow plug igniter as soon as the engine is running. Leaving it connected will drain the battery.

Retire el calentador de bujías una vez el motor este en marcha. Si lo deja conectado descargara la batería.

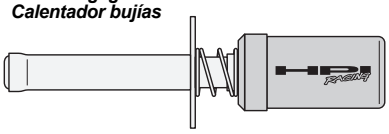
74104 (EU 3Pin)
74105 (US)
74106 (EU 2Pin)
74107 (JP)
Glow Plug Igniter
Calentador bujías

You must charge before use.
Cárguelo antes de usarlo

Compatible Charger
Cargador compatible



Glow Plug Igniter
Calentador bujías



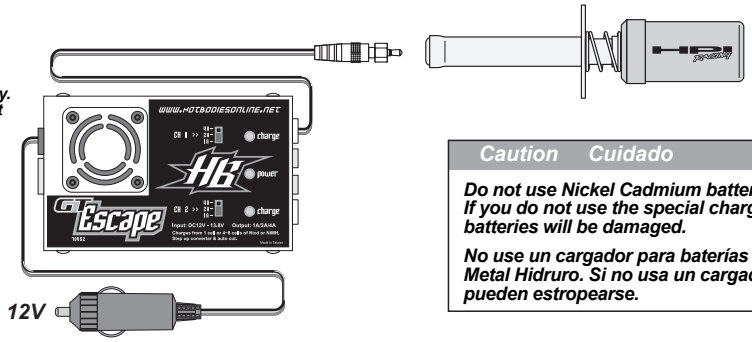
Optional Battery Charger Cargador de baterías opcional

This charger is powered by a standard 12V lighter socket. This charger is designed for Ni-MH battery.
Esta cargador se alimenta a 12v c a través de una toma de mechero. El cargador esta diseñado para baterías Ni-Mh

HB70452
GT Escape Charger
Cargador GT Escape

12V DC power source necessary. Two batteries can be charged at the same time.

Es necesario conectar el cargador a una fuente de 12v. Pueden cargarse dos baterías a la vez.



Caution Cuidado

Do not use Nickel Cadmium battery charger for Nickel Metal Hydride batteries. If you do not use the special charger for Nickel Metal Hydride batteries, the batteries will be damaged.

No use un cargador para baterías de Níquel Cadmio para cargar las de Níquel Metal Hidruro. Si no usa un cargador especifico para Ni-Mh las baterías pueden estropearse.

Transmitter Preparation
Preparación emisora

Battery Level Indicator
Indicador de carga

Good Batteries
Buen estado

Low Batteries
Batería baja

Antenna
Antena

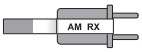
Extend the antenna to the maximum length for best performance.

Extienda completamente la antena para lograr las mejores prestaciones

AM 27MHzTransmitter Crystal (TX)
Cristales emisora Am 27 Mhz (TX)

AM Transmitter crystal (TX)
Cristal Emisora AM (TX)

AM Receiver crystal (RX)
Cristal receptor AM (RX)

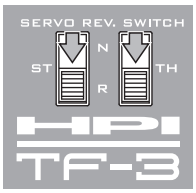


The crystal can be replaced to change frequencies.
Note: You must also change receiver crystals!
Do not use FM crystals

Los cristales pueden cambiarse para variar la frecuencia.
Nota; Cambien también el cristal del receptor ¡¡
No use cristales FM

Reverse Switch
Inversores servos

! Servo Factory Settings
Ajuste de fabrica



Steering Trim
Ajuste dirección

To be used for trimming the steering operation.

Uselo para ajustar la dirección

Throttle Trim
Ajuste acelerador

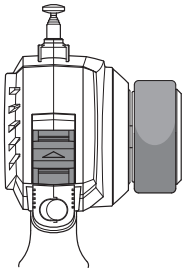
To be used for trimming the throttle operation.

Uselo para ajustar el acelerador

Power Switch
Interruptor

ON

OFF



Steering Dual Rate
Dual-rate dirección

To be used to adjust steering servo rate and range.
Uselo para ajustar el recorrido de la dirección

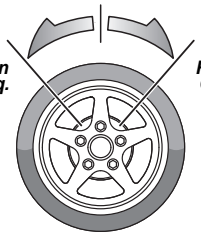
Steering Wheel
Volante dirección

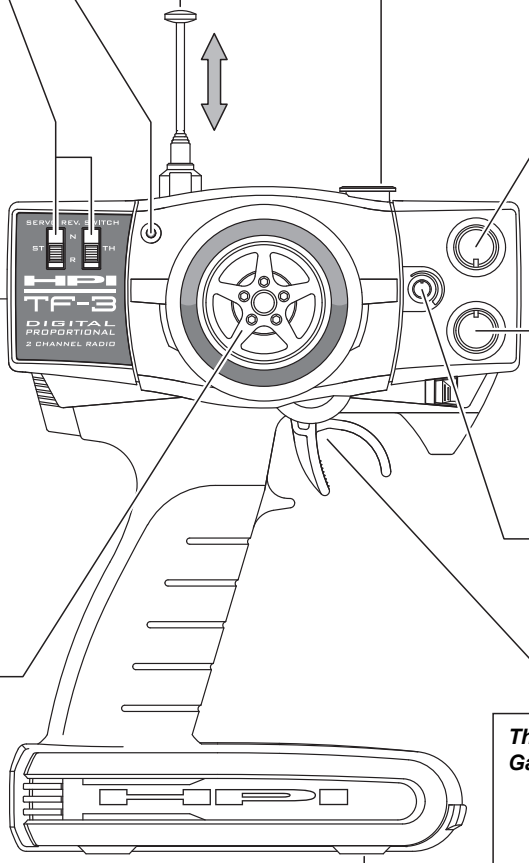
To be used for steering operation.
Uselo para mover la dirección

Straight (Neutral)
Recto (neutro)

Left turn
Giro Izq.

Right turn
Giro Der.



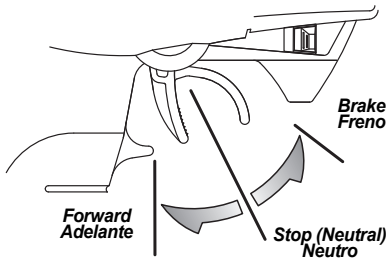


! The Savage X includes a two-channel TF-3 Radio. When installing a reverse module, you must use option part #87039, which includes a mixer that allows the reverse module to function with the third servo.

El Savage X incluye una emisora de 2 canales TF-3. Si va a instalar el modulo de marcha atrás debe colocar la pieza ref.87039, que incluye un mezclador para que funcione la marcha atrás con el tercer servo.

Throttle trigger
Gatillo acelerador

To be used for throttle operation.
Uselo para acelerar-frenar



Transmitter Battery Installation Instalación baterías emisor

Open battery cover at the bottom of transmitter. Install batteries. Follow the direction of batteries designated in the inside of battery box.

Abra el compartimento situado bajo el emisor. Coloque las baterías siguiendo la posición indicada en el interior del compartimento.

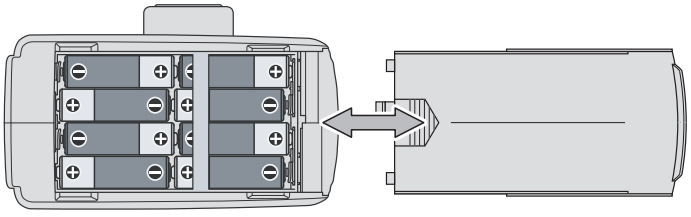
8x AA Alkaline Batteries
Baterías alcalinas AA

Attention Atención

! Do not mix batteries of different ages or types.

No mezcle distintos tipos de baterías

Battery Cover
Tapa baterías



How To Control R/C Models
Como controlar modelos R/C

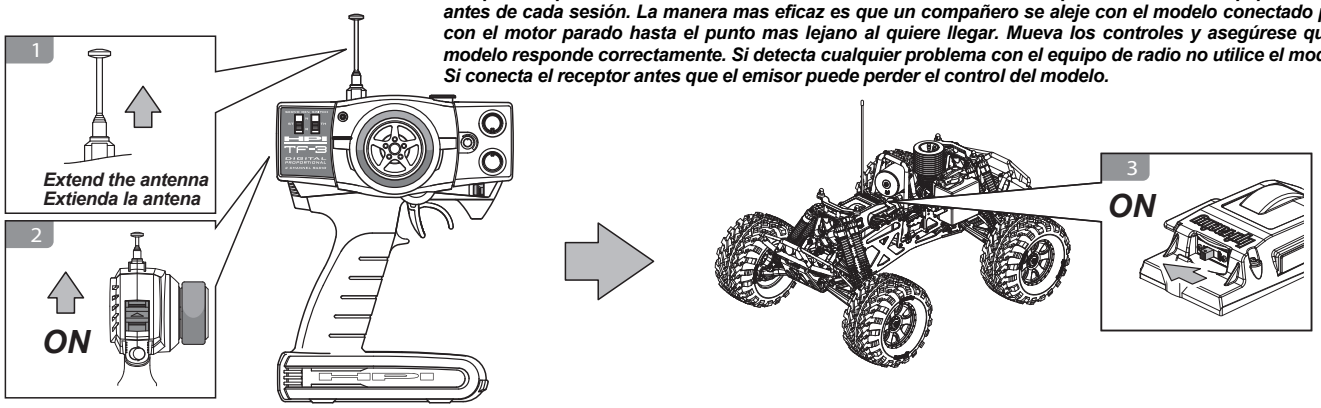
Activating R/C Unit Conexión equipo radio

Turn on transmitter first, then turn on receiver.

Conecte primero el emisor y a continuación el receptor

Make sure no one else is using the same radio frequency as you are using. Check the radio system and range before every driving session. To properly check the range, have a friend hold the R/C car with the engine off and walk to the farthest distance that you plan to operate your R/C car. Operate the controls to make sure the model responds correctly. Do not operate the model if there is any problem with the radio system. If you switch on the R/C car first before the transmitter, you may lose control of the R/C car.

Compruebe que nadie mas utiliza su misma frecuencia de radio. verifique el alcance del equipo de radio antes de cada sesión. La manera mas eficaz es que un compañero se aleje con el modelo conectado pero con el motor parado hasta el punto mas lejano al quiere llegar. Mueva los controles y asegúrese que el modelo responde correctamente. Si detecta cualquier problema con el equipo de radio no utilice el modelo. Si conecta el receptor antes que el emisor puede perder el control del modelo.



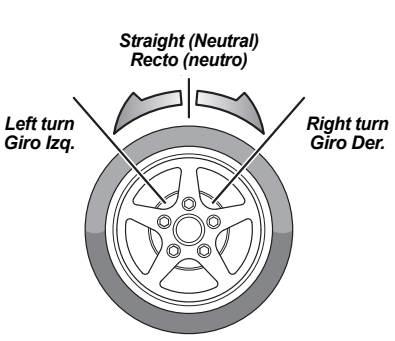
Check Max. Range Compruebe el alcance

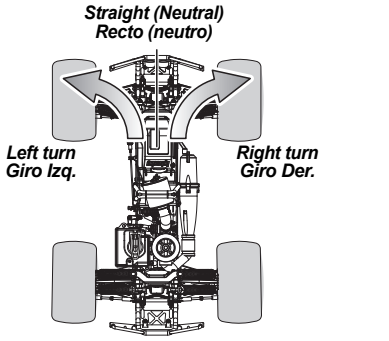
Transmitter Operation Funcionamiento del emisor

Steering Wheel Volante dirección

Turning the transmitter wheel left and right will make the front tires of the car do the same. Turning the wheel a small amount will make the model perform a wide turn. Turning the wheel a large amount will make the model perform a sharp turn.

Al girar el volante del emisor las ruedas de modelo giran en el mismo sentido del volante. Si damos poco giro al volante lograremos una curva abierta. Si damos un mayor giro al volante lograremos una curva mas cerrada.

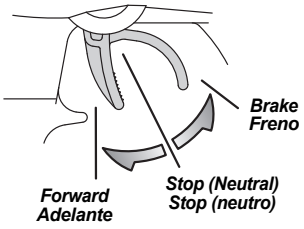


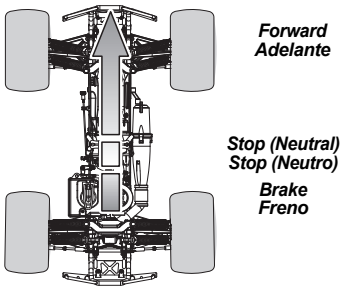


Throttle Trigger スロットルトリガー

Pull the throttle to drive forward and press it away for brakes. The more you pull the throttle, the faster the car will move forward.

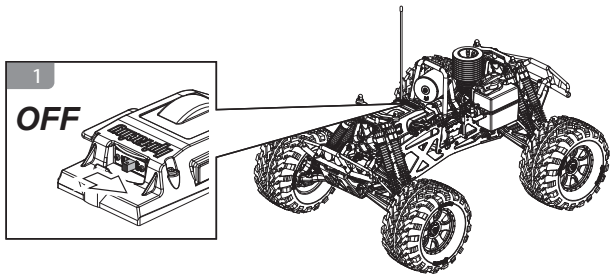
スロットルトリガーを引くと前進、反対に押すとブレーキがかかります。
スロットルトリガーの操作量に応じて車のスピードが変わります。

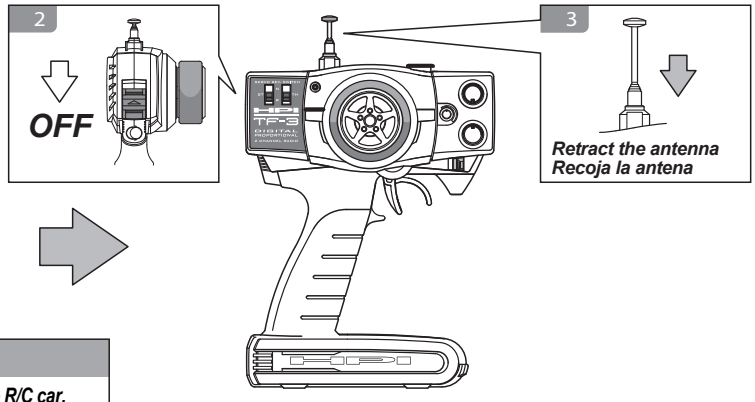




Turning R/C Unit Off Apagado del equipo R/C

Turn off receiver first, then turn off transmitter.
Apague primero el receptor y después el emisor





Caution Atención

If you switch off the transmitter first before the R/C car, you may lose control of the R/C car.
Si apaga antes el emisor que el receptor puede perder el control de su modelo.

2-6 Linkage Setup / Ajuste varillaje

Trim adjusts neutral position of servo.
Make adjustments with the engine off.

El ajuste se realiza en la posición neutral del servo.
Realice todos los ajustes con el motor parado.

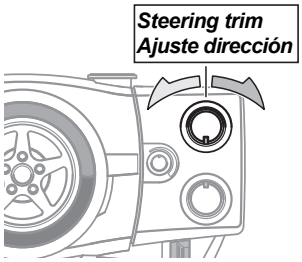
Important Importante

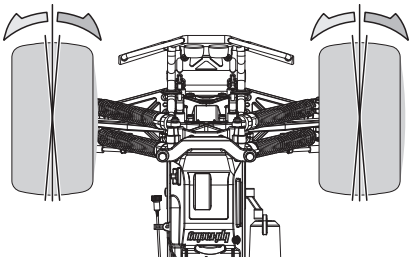
- ***If throttle linkage is not set up correctly the car may lose control after the engine is started.***
- ***Si el varillaje del acelerador no esta correctamente ajustado puede perder el control de su modelo al arrancarlo***

Steering Trim Setup Ajuste dirección

Turn steering trim to set tires in completely centered position.

Ajuste la dirección hasta que las ruedas estén completamente rectas



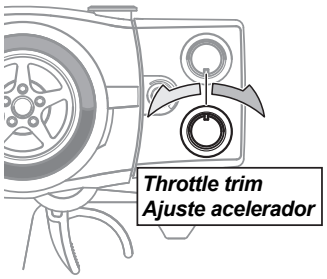


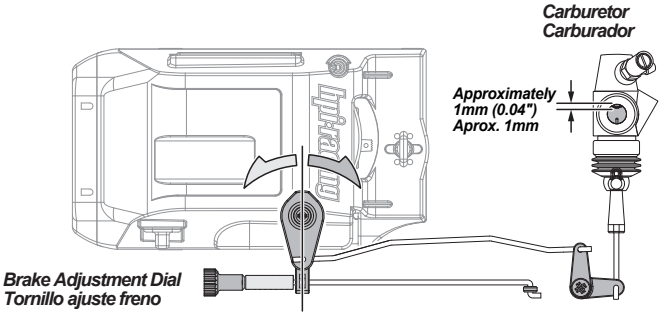
Throttle Linkage Setup Ajuste varillaje acelerador

Turn throttle trim little by little and adjust rods as shown.
Ajuste el acelerador poco a poco hasta lograr la medida deseada

Important Importante

- ***No brake drag at neutral.***
  Sin freno en neutro

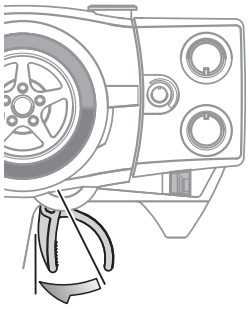




Optional Throttle Linkage Setup Ajustes opcionales del varillaje

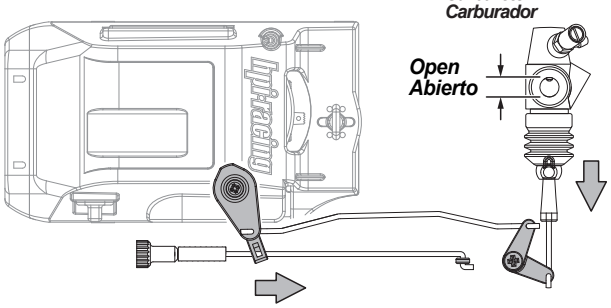
Remove air filter to adjust throttle linkage. After setup is complete, reinstall the air filter. See Section 3-4.
Retire el filtro de aire para realizar el ajuste. Una vez acabado, vuelva a colocar el filtro de aire . Vea sección 3-4

Setting Full Throttle Ajuste máxima aceleración

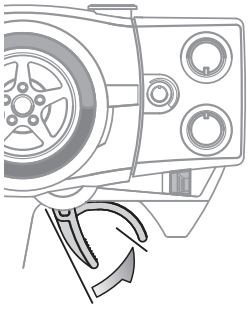


Pull full throttle.
Make sure the carburetor is open.

Apriete el gatillo al máximo.
Compruebe que el carburador esta abierto

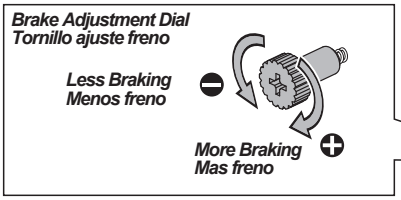


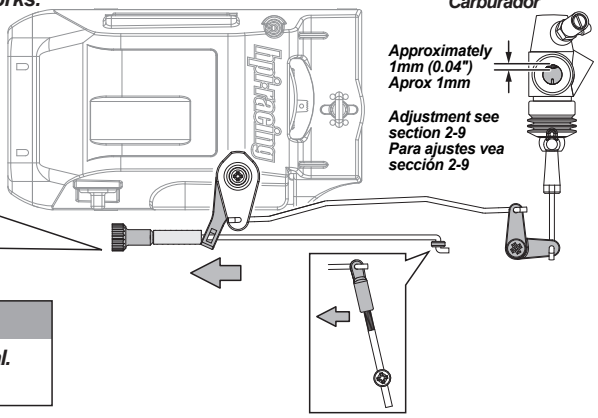
Setting Full Brake Ajuste máximo freno



Push trigger to the full brake position.
Try pushing the car to make sure the brake works.

Empuje el gatillo hasta la posición de máximo freno. Mueve el modelo para asegurarse que frena correctamente.





Important Importante

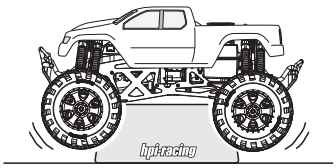
- ***Make sure there is no brake drag at neutral.***
  Asegúrese que no esta frenado en neutro

2-7 Starting Engine and Break In
Puesta en marcha y rodaje

These instructions will explain the running procedure, how to prepare the car, turn on radio equipment, start the engine, break in the engine, shut off the engine, and shut off the radio equipment. When starting the engine for the first time, you must perform the break in procedure. Make sure no one is using the same frequency. Turn on transmitter first and receiver second. If you turn on the receiver first, it can cause you to lose control of the car.
En estas instrucciones le indicamos el procedimiento de puesta en marcha, como preparar su modelo, como conectar su emisor, como arrancar su motor , como hacerle el rodaje, como parar el motor y el equipo de radio. La primera vez que arranque el motor deberá seguir el procedimiento de rodaje. Asegúrese que nadie usa su misma frecuencia. Conecte primero el emisor y a continuación el receptor, si conecta primero el receptor puede perder el control de su modelo.

Step 1 Preparation for Engine Start Preparación puesta en marcha

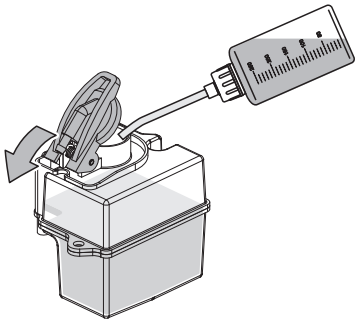
Keep the wheels off the ground.
Evite que las ruedas toquen el suelo



Step 2 Fill Fuel Tank Llene el deposito

Fill the tank completely with fuel. Use only 20 to 25% nitro content fuel. Use high quality model car fuel only. Using non-car fuels could void your warranty.

Llene el deposito completamente. Use solo combustible con un 20-25% de nitrometano. Use exclusivamente combustible de calidad. El uso de combustible no especifico puede hacerle perder la garantía.

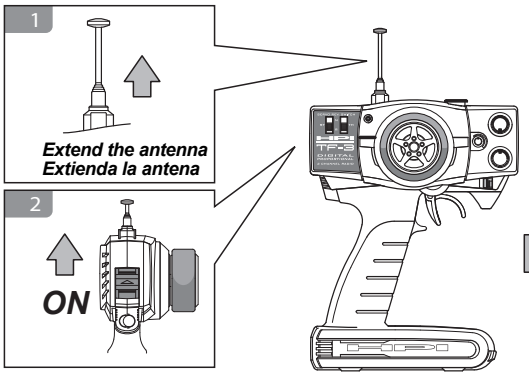


We recommend that you use fuel containing 20-25% nitro glow fuel. Recomendamos usar combustible con un 20-25% de nitrometano.

20% - 25%

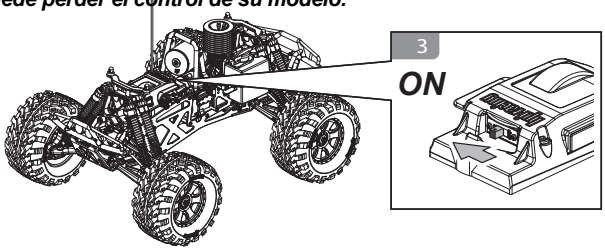
74318/74348 (US)
38704/38705 (JP)
Glow Fuel
Combustible

Step 3 Turn On Radio System Conexión equipo radio



Make sure no one is using the same frequency. Turn on transmitter first, then turn on receiver. Check the throttle and steering functions and check the radio range before starting engine. If you switch on the R/C car first before the transmitter, you may lose control of the R/C car.

Compruebe que nadie usa su misma frecuencia. Conecte primero el emisor y a continuación el receptor. Compruebe el funcionamiento de todas las funciones y el alcance de su emisor antes de arrancar. Si conecta el receptor antes que el emisor puede perder el control de su modelo.



Step 4 Priming Engine Cebado del motor

To prime the engine, use your finger to cover the exhaust tip. crank engine with Roto Start until fuel reaches the carburetor and no bubbles are seen. Using Roto Start too long will cause the engine to be flooded.

Para cebar el motor, tape la salida del escape con el dedo, gire el motor con el Roto Start hasta que llegue combustible sin burbujas hasta el carburador. Si usa demasiado el Roto Start puede ahogar el motor.

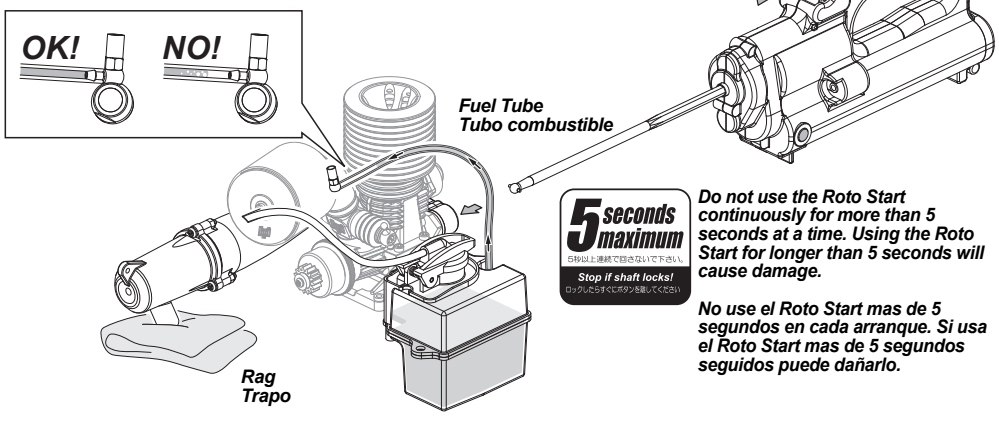
Flooded Engine Motor ahogado

If there is too much fuel in the cylinder, the engine will not start.
Follow the step below to remove excess fuel from the cylinder.

Si el motor tiene demasiado combustible en el cilindro ,no arrancara. Siga el paso siguiente para poder arrancarlo.

Remove the glow plug and turn the engine using the Roto Starter to remove excess fuel. Reinstall the glow plug .

Quite la bujía y haga rodar el motor con el Roto Start para eliminar el exceso de combustible. Coloque la bujía.



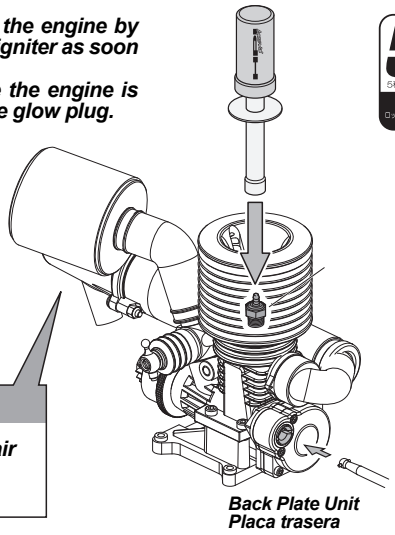
Do not use the Roto Start continuously for more than 5 seconds at a time. Using the Roto Start for longer than 5 seconds will cause damage.

No use el Roto Start mas de 5 segundos en cada arranque. Si usa el Roto Start mas de 5 segundos seguidos puede dañarlo.

Step 5 Glow Plug and Starter Bujía y arranque

Attach the glow igniter to the glow plug. Start the engine by cranking with the Roto Start. Remove the glow igniter as soon as the engine is running.
If the glow plug igniter is left connected while the engine is running, it will drain the battery and damage the glow plug.

Coloque el calentador de bujías. Arranque el motor con el Roto Start. Desconecte el calentador de bujías en cuanto el motor arranque.
Si deja el calentador conectado con el motor en marcha se descargara la batería y dañara la bujía.



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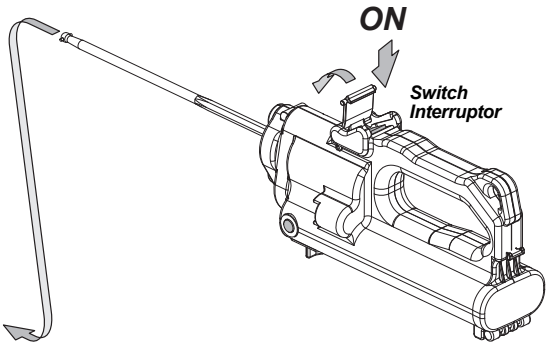


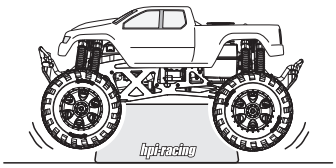
Attention Atención

- *The engine must never be run without the air filter in place.*
- *No arranque el motor sin el filtro de aire.*

Step 6 Break In Rodaje

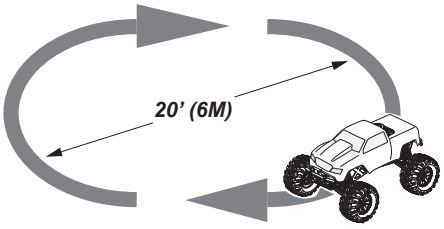
1 *HPI engines will feel tight at the top of their stroke when they are new or when they have not reached their normal operating temperatures. The piston and cylinder sleeves are designed to achieve proper running tolerances when they are properly broken in and are operating at the correct temperature. New engines need a break in period of about 3 to 4 tanks of fuel before they can be run at full throttle, if not the engine could be damaged. Break in should be performed on a flat level surface.*

Los motores HPI dan sensación de estar clavados al final del recorrido del pistón cuando es nuevo y aun no han rodado a su temperatura de uso. El cilindro y el pistón están diseñados para mantener las tolerancias cuando han sido correctamente rodados y trabajan a su temperatura. Los motores nuevos necesitan 3 o 4 depósitos de combustible antes de poder rodar a máxima velocidad, si no se realiza el rodaje el motor puede dañarse. El rodaje debe realizarse en un lugar plano.



2 *After the engine starts, let it run with the wheels off the ground for one tank of fuel. After the first tank, drive the car in a circle at half throttle for two tanks of fuel.*

Una vez arrancado el motor, deje consumir un deposito con las rueda girando en el aire. Después de este primer deposito consuma dos depósitos mas rodando en círculos.



Attention Atención

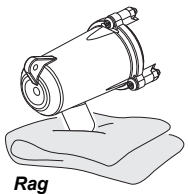
- *New engines need a break in period of about 3 to 4 tanks of fuel before they can be run at full throttle, if not the engine could be damaged.*
  If the air filter falls off, you must stop the engine immediately.
- *Los motores nuevos necesitan un rodaje de 3 o 4 depósitos antes de poder acelerar al máximo, si no realiza el rodaje el motor puede estropearse. Si el filtro de aire se suelta detenga el motor inmediatamente.*

Step 7 Engine Shut Off Parar el motor

Use a Rag Usando un trapo

Use a rag to cover the exhaust tip. This will stop the engine. Be careful! The exhaust is extremely hot so be sure to use a thick rag.

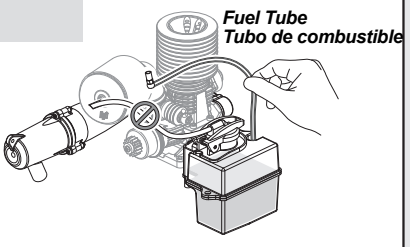
Use un trapo para tapar la salida del escape y parar el motor. Tenga cuidado, el escape puede estar muy caliente, asegúrese de usar un trapo grueso.



Pinch the Fuel Line Pensionado el tubo de combustible

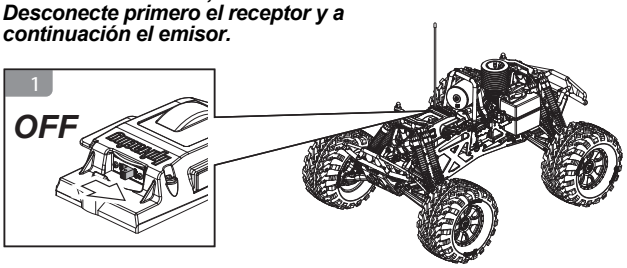
In extreme cases or emergencies you can pinch the fuel line to stop the flow of fuel to the carb.

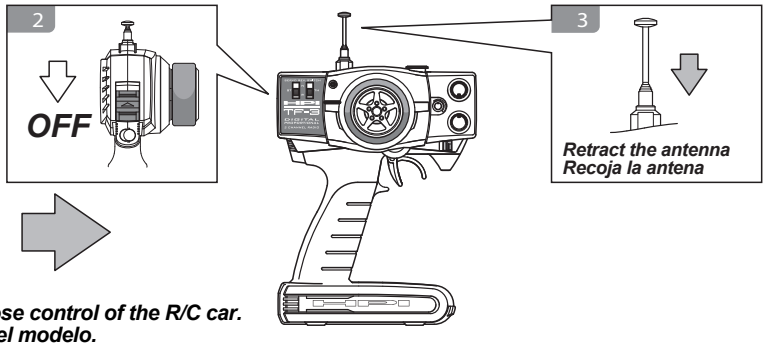
En caso de emergencia puede pinzar el tubo de combustible del carburador



Step 8 Turning R/C Unit Off Apagado del equipo radio

Turn off receiver first, then turn off transmitter.
Desconecte primero el receptor y a continuación el emisor.





- *If you switch off the transmitter first before the R/C car, you may lose control of the R/C car.*
  Si apaga el emisor antes que el receptor puede perder el control del modelo.

2-8 Engine Tuning After Break in / Ajuste motor después del rodaje

The carburetor is set up from the factory for break in (2-9). After break in the carburetor must be tuned for high performance running.

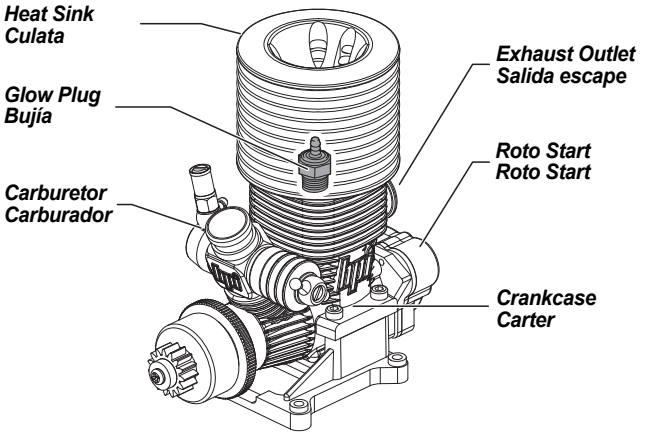
El carburador esta ajustado de fabrica para el rodaje. (2-9). Después del rodaje el carburador debe reajustarse para unas mejores prestaciones.

Important Importante

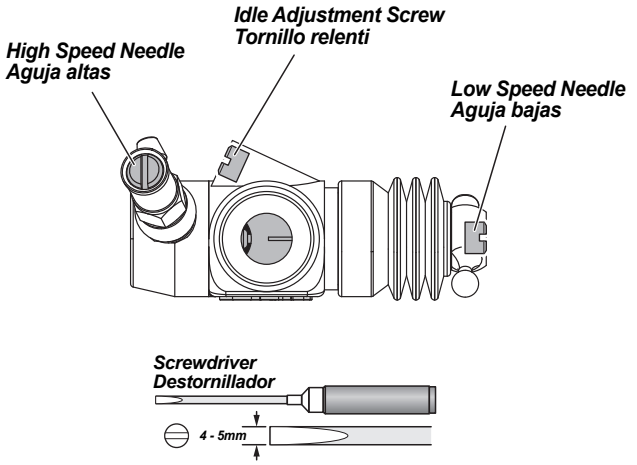
Read this section carefully: Failure to follow these tuning steps could result in damage to your engine, and void your warranty!

Lea esta sección con cuidado, No seguir las instrucciones correctamente puede dañar su motor y hacerle perder la garantía.

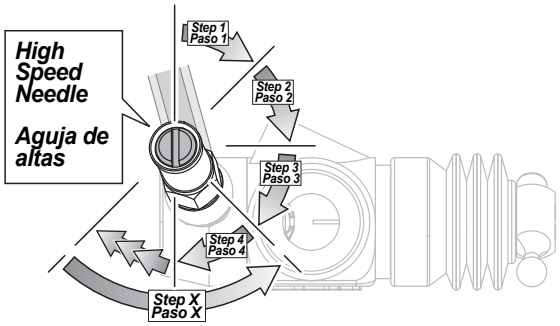
Engine Features Partes del motor



Carburetor Features Partes del carburador



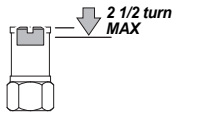
Tuning for Optimum Performance Ajustes para prestaciones óptimas



Use screwdriver to adjust high speed needle.

Use un destornillador para ajustar las altas.

Caution Cuidado



2 1/2 turn MAX clockwise from flush.
2 vueltas y media máximo por debajo del nivel.

Step 1 — Step 4

*Turn the high speed needle clockwise in **1/8 turn increments** to lean out the fuel mixture for increased top speed and throttle performance. Drive the car to notice changes in speed and throttle response.*

Continue Tuning:
*Continue leaning the carb in Clockwise 1/8 turn increments. **(Maximum of 2 1/2 turns from flush.)***

STOP Tuning:
*Stop tuning and go to **Step X** if your engine shows any of the following signs. (Engine is running too lean.)*

- *At full throttle, there is **no smoke** from the exhaust.*
- *The engine **hesitates or bogs**.*
- *Reduced top speed and loss of power.*
- *Overheating*
  Temperatures above 250°F (120°C)
  at the glow plug.

Step X

*If your engine is running lean, turn the needle counter clockwise 1/4 turn to richen the fuel mixture and repeat **Step 1** — **Step 4***

Paso 1 — Paso 4

Apriete la aguja de altas en pasos de 1/8 de vuelta para empobrecer la mezcla y aumentar así la velocidad y la respuesta al acelerador. Ruede con el modelo para notar las modificaciones.

Continúe ajustando:
Siga cerrando la aguja en pasos de 1/8 (Máximo 2 vueltas y media)

Pare de ajustar:
*Pare y vaya al **Step X** si su motor muestra alguno e estos signos (el motor rueda muy seco)*

- *Gas a fondo el motor no humea*
- *El motor no acelera continuo o "tose"*
- *Reduce la velocidad o la potencia.*
- *Sobrecalentado.*
  Temperaturas de 120º en la bujía

Paso X

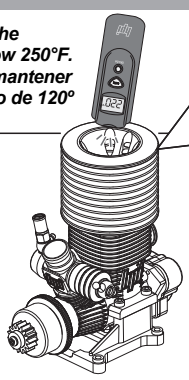
*Si su motor rueda demasiado seco, abra la aguja de altas 1/4 de vuelta para enriquecer la mezcla y repita **Paso 1** — **Paso 4***

Fuel Mixture Tuning Tip Ajustes mezcla combustible

Engine temperature can tell you if the engine is running lean or rich.
La temperatura del motor indica si la carburación es rica o seca

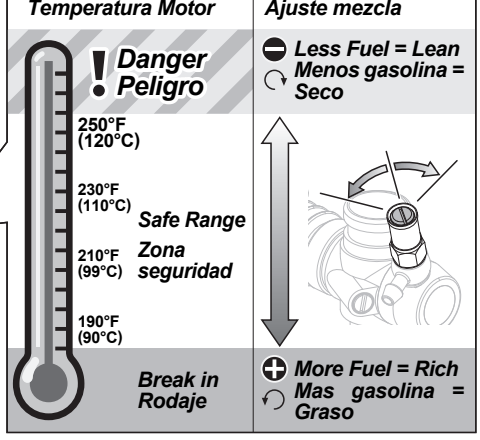
Attention Atención

Adjust carburetor to keep the operating temperature below 250°F.
Ajuste el carburador para mantener una temperatura por debajo de 120º



74151
HPI Racing Temp Gun

Termómetro HPI Racing



Less Fuel = Lean
Menos gasolina = seco

Lean Fuel Mixture
Provides strong and efficient combustion and power, but if you lean out too much the result is less lubrication, more engine heat and shorter engine life.

Mezcla seca;
Tiene una mejor combustión y potencia, pero si esta demasiado seco el resultado es una menor lubricación, mayor temperatura y una menor duración.

More Fuel = Rich
Mas gasolina = graso

Rich Fuel Mixture
A slightly rich fuel mixture delivers a cooler running temperature and more lubrication but with slightly less power and longer engine life.

Mezcla rica:
Una mezcla mas rica disminuye la temperatura de uso y mejora la lubricación, pero pierde potencia aumentado la vida del motor.

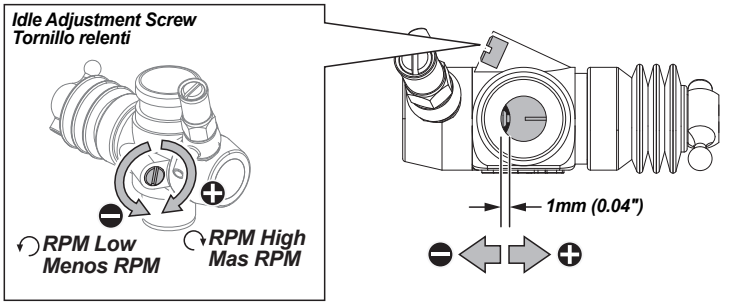
Fuel Mixture Tuning Tips Ajustes de altas

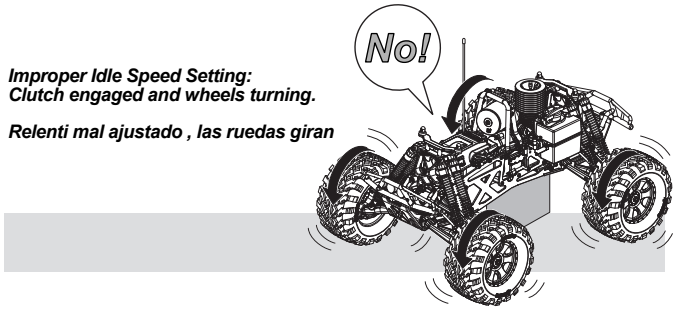
- Following the tuning steps, tune the engine until its maximum performance is reached. While a lean motor will have higher performance, it can lead to premature engine wear or failure. Use the following information to tune your engine to your driving conditions. Remember a slightly rich setting is a safer setting.
- Engine temperature can tell you if the engine is running lean or rich. If you check the engine temperature, you can understand how to tune your carburetor. Adjust carburetor to keep the operating temperature below 250°F. If the engine temperature goes over 250°F, the engine will be damaged.
- If you turn the needle past the closed point, it will be damaged. Do not tighten past closed.
- If you lose the needle setting, you can reset the factory setting (See Section 2-10) and re-tune.
- Siguiendo estas instrucciones lograra que su motor alcance sus máximas prestaciones, Cuando un motor esta ajustado seco tiene mejores prestaciones pero su desgaste es mayor y puede tener mas fallos. Use este manual para ajustar su motor a su manera de pilotar. Recuerde que con un reglaje mas graso prolongamos la vida del motor.
- La temperatura del motor le indica si su ajuste es seco o graso. Controlando la temperatura de su motor entenderá como ajustarlo. Ajuste la carburación para lograr una temperatura de trabajo por debajo de los 120º. Si la temperatura sobrepasa los 120º , el motor puede dañarse.
- No cierre en exceso la agujas, pueden estropearse. No apriete en exceso.
- Si duda del ajuste de la aguja, vuelva al ajuste de fabrica (vea sección 2-9) y reajuste de nuevo

2-9 Optional Tuning / Ajustes opcionales

Idle Adjustment Screw Ajuste relenti

Idle should be set so that at neutral throttle position the engine is running without engaging the clutch and moving the car forward.
El relenti debe ajustarse de manera que con el motor en marcha el embrague no arrastre la campana y el coche avance.



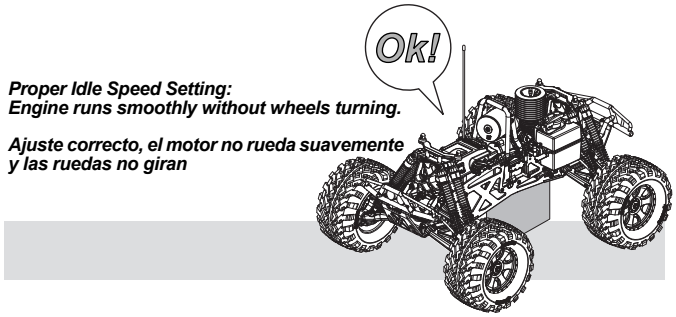


Improper Idle Speed Setting:
Clutch engaged and wheels turning.

Relenti mal ajustado , las ruedas giran

The idle speed is set after the high-speed needle is adjusted and the engine is up to operating temperature. To properly set the Idle Adjustment Screw, turn on your radio system and set the throttle trim on the transmitter so that the throttle is in its neutral position. This will ensure that the throttle slide is fully closed and resting against the idle adjustment screw. Turn the idle adjustment screw counter clockwise to reduce the idle speed, or clockwise to increase it. The idle speed should be set high enough to keep the engine running smoothly but not engage the clutch and turn the wheels. Too high of an idle speed will prematurely wear out the clutch shoes and brake disk.

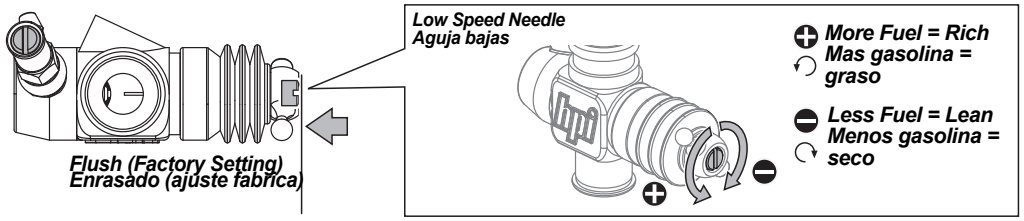
El ajuste del relenti debe realizarse después del de la aguja de altas y con el motor caliente. Para lograr un ajuste correcto, conecte su emisor y coloque el ajuste de acelerador en neutro. En esta posición logramos que el carburador este cerrado y el tornillo actúe correctamente. El ajuste se realiza apretando el tornillo para aumentar las revoluciones o aflójelo para disminuirlo. El ajuste correcto debe dejar que el motor ruede suavemente pero sin que el embrague arrastre la campana y mueva las ruedas. Un ajuste demasiado alto desgasta las zapatas de embrague en exceso.



Proper Idle Speed Setting:
Engine runs smoothly without wheels turning.

Ajuste correcto, el motor no rueda suavemente y las ruedas no giran

Low Speed Needle Adjustment Ajuste aguja bajas



If idle is unstable, adjust the low speed needle to get a stable idle. Afterwards, you need to readjust the idle adjustment screw.

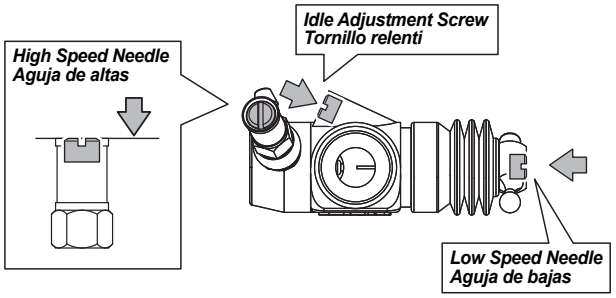
Si el relenti es inestable. ajuste la aguja de bajas para estabilizarlo. Luego necesitara reajustar el relenti

We recommend that you do not touch the Low Speed Needle. If adjustment is needed, the low-speed mixture is set after the high-speed needle is adjusted and the engine is up to operating temperature. Set the needle flush (Factory Setting) with the carburetor body, this setting is ideal for breaking in and starting your motor. For increased performance turn the needle in 1/8 turn increments; this will improve bottom end throttle response. To test your setting, place the car on the ground and let the engine idle for 30 seconds then accelerate to 3/4 throttle. If there is a lot of white smoke and the car accelerates slowly, the mixture is too rich. If the engine accelerates quickly and then sputters, the mixture is too lean. When the low-speed needle is set correctly the engine's throttle response should be smooth and quick. CAUTION: Never turn in more than 2 turns from flush this will cause the engine to run too lean and may damage your engine! If the Low Speed Needle is set too lean you will experience the following: Flame out at part or 3/4 throttle, overheating (temperatures above 280 F at the glow plug). If your engine is running too lean, reset the Low Speed Needle to its factory setting (Flush) and start the tuning process again.

Le recomendamos que no toque la aguja de bajas. Si es necesario realizar algún ajuste, la aguja de bajas debe ajustarse después de la)aguja de altas y el motor ya esta en temperatura de uso. Ajuste la aguja enrrasada (ajuste de fabrica), este ajuste es el ideal para arrancar su motor y realizar el rodaje. Para aumentar las prestaciones mueva la aguja en tramos de 1/8 de vuelta, este ajuste mejora la respuesta del motor a bajas revoluciones. Para comprobar que su ajuste es correcto , deje el motor al relenti durante 30 segundos y a continuación acelere hasta 3/4 de recorrido del acelerador. Si el motor echa mucho humo blanco y el coche acelera lentamente, el reglaje es muy graso. En cambio si el motor sube de vueltas y ratea, el ajuste es demasiado seco. Cuando el ajuste es correcto , el motor acelerara progresivamente y sube rápido de vueltas. CUIDADO: Nunca cierre mas de 2 vueltas sobre el ajuste de fabrica, eso ara funcionar el motor demasiado seco y estropeara su motor. Si la aguja de bajas esta demasiado cerrada notara lo siguiente: Rodando a 3/4 de gas , su motor se sobrecalentara (temperaturas superiores a 150º en la bujía). Si su motor esta ajustado demasiado seco , coloque la aguja de bajas en el reglaje de fabrica y reinicie el reglaje.

2-10 Carburetor Factory Setting (Break In Setting)
Carburador ajustado de fabrica (Ajustes de rodaje)

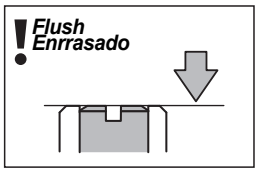
High Speed Needle, Idle Adjustment Screw and Low Speed Needle are designed to be set flush with the carburetor body. This makes it easy to reset the carburetor to the Factory Break In Setting if needed.



Attention Atención

! *When needle is over tightened, the needle is damaged.*

Si aprieta las agujas en exceso ,pueden dañarse



2-11 Glow Plug
Bujía

How Glow Plugs Work Como funciona la bujía

Unlike full sized car engines that use spark plugs and a distributor to fire the cylinders in the combustion cycle, glow engines rely on glow plugs. In a Nitro engine, ignition is initiated by the application of a glow igniter. When the igniter is disconnected, the heat inside the combustion chamber keeps the glow plug filament glowing, firing the next cycle, thereby keeping the engine running. Ignition timing in a glow engine is automatic. At higher RPM's the plug becomes hotter, firing the fuel/air mixture earlier. At lower RPM's the plug becomes cooler, firing the fuel/air mixture later. Since the glow plug performs so many important functions, proper plug selection and maintenance are crucial to a properly running engine.

Al contrario de los coches reales que usan las bujías y el encendido para poner en funcionamiento los cilindros del motor , los motores Glow usan unas bujías especificas. En un motor Nitro el encendido se realiza aplicando un calentador. Cuando se desconecta el calentador, la temperatura en el interior del motor mantiene el filamento de la bujía incandescente, iniciando así el siguiente ciclo. A mayores revoluciones la bujía aumenta de temperatura y quema la mezcla con mas rapidez. A menores revoluciones la bujía se enfría y tarda mas en quemar la mezcla. Así pues la bujía tiene una vital importancia en el funcionamiento del motor, una correcta elección y mantenimiento de la bujía mejora las prestaciones e su motor.

Proper Glow Plug Selection Elección de la bujía

Proper glow plug selection depends on several factors: Fuel type, nitro methane content, weather, and altitude can drastically affect performance. Finding the best combination of fuel and plug temperature for your driving condition is the key to getting the maximum performance out of your Nitro Star Engine.

La elección de la bujía correcta depende de varios factores: Tipo de gasolina,porcentaje de nitrometano, clima y altitud afectan a las prestaciones de su motor. Lograr la mejor combinación entre el combustible la bujía y su manera de pilotar es la llave para obtener las mejores prestaciones.

Outdoor Temp Temperatura	Glow Plug Bujía	Glow Plug Characteristics Características de la bujía
Hot 暑い	R5 #1504 Glow Plug Cold R5 Bujía fria R5	Cold plug will have better mid, high RPM power and will last longer at high temperature. La bujía fria es mas eficaz a medias revoluciones es mas resistente a altas temperaturas
	R4 #1503 Glow Plug Medium Cold R4 Bujía medio fria R4	
Cold 寒い	R3 #1502 Glow Plug Medium R3 Bujía media R3	Hot plug will be easy to start and stable for tuning. But will fail sooner at high engine temperature. Con la bujía caliente es mas fácil arrancar el motor y mas estable a los ajustes. Pero falla a altas temperaturas

Extending the Life of your Glow Plug Prolongar la vida de la bujía

To maximize and extend the life of your glow plug follow these simple tips;
- *Remove the glow igniter when using more than 1/2 throttle or if the engine does not start after a few seconds.*
- *Do not run the engine lean, lean conditions will overheat the plug causing the element to be damaged or fail.*
- *Use the best Fuel/Plug combination for your driving conditions.*
- *Use a fuel that has a lower nitro content.*

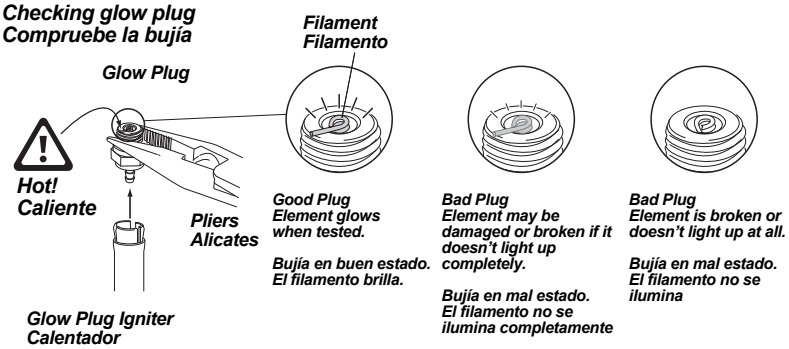
Para mantener su bujía en buen estado y prolongar su vida útil , siga estos consejos:
- *Retire el calentador si el motor no arranca en unos segundos.*
- *No use ajustes muy secos, si lo hace la bujía se daña rápidamente*
- *Busque la combinación entre gasolina y bujía que mejor se adapte a su pilotaje*
- *Use un combustible con poco porcentaje de nitro*

When to Replace the Glow Plug Cuando cambiar la bujía

Fuel and temperature will have an effect on the performance, reliability, and life span of the glow plug and therefore it should be considered an expendable engine component. Aside from burnout or plug failure, there are several signs that can indicate the plug should be replaced.
- *Plug filament/plug body is discolored or the surface is rough.*
- *Plug filament is distorted or bent.*
- *Engine cuts out when idling.*
- *Engine becomes difficult to start.*

El combustible y la temperatura afectan las prestaciones ,respuesta y resistencia de su bujía , la bujía debe considerarse una parte intercambiable de su motor. En caso de sobrecalentamiento o fallo de la bujía existen unos síntomas que nos indican que debemos sustituirla.
- *El filamento o el cuerpo de la bujía esta descolorido o la superficie esta rugosa*
- *El filamento esta retorcido o roto.*
- *El motor se para al ralenti*
- *El motor es dificil de arrancar.*

Checking glow plug
Compruebe la bujía



If R/C car does not move or you have no control, see below.
Si el coche no se mueve o no responde .

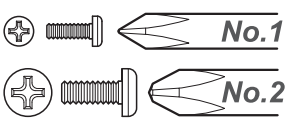
Problem / Problema	Cause / Causa	Solution / Solución	Section / Sección
Engine Does Not Start. Motor no arranca	Out of fuel. Sin combustible	Fill the tank with fuel and prime engine. Llene el deposito y cebe el motor	2-7
	Air filter is blocked. Filtro de aire obturado	Check air filter, clean or replace if necessary. Compruébelo, limpielo o sustitúyalo si es necesario	3-4
	Glow plug igniter not charged. El calentador esta descargado	Charge glow igniter battery. Cargue el calentador	2-3
	Engine flooded. Motor ahogado	Discharge fuel. Vacíelo de combustible	2-7
	Glow plug is bad. Bujía en mal estado	Replace glow plug. Cambie la bujía	2-11
	Throttle isn't adjusted properly. Acelerador mal ajustado	See section 2-10 on carburetor factory setting then see section 2-8 on engine tuning after break in. Vea la sección 2-10 los ajustes de fabrica del carburador y a continuación vea la sección 2-8 de ajustes después de rodaje.	2-10
	Roto Start working properly? ¿Funciona correctamente el Roto Start?	Make sure Roto Start starting shaft is turning. Compruebe que el eje de arranque gira correctamente	2-2 3-17
	Throttle servo is improperly set up. Mal ajuste del servo del acelerador	Set servo to neutral and reset linkage according to radio and model manufacturer's specifications. Coloque el servo en neutro y reajuste el varillaje siguiendo las instrucciones de la emisora.	2-6
Engine Starts Then Stalls. El motor arranca y se para	Out of fuel. Si combustible	Fill the tank with fuel and prime engine. Llene el deposito y cebe el motor	2-7
	Air filter is blocked. Filtro de aire obturado	Check air filter, clean or replace if necessary. Compruébelo, limpielo o sustitúyalo si es necesario	3-4
	Idle speed is set too low. Relenti muy bajo	Adjust the idle speed. Ajuste el relenti	2-9
	Throttle isn't adjusted properly. Acelerador mal ajustado	See section 2-10 on carburetor factory setting then see section 2-8 on engine tuning after break in. Vea la sección 2-10 los ajustes de fabrica del carburador y a continuación vea la sección 2-8 de ajustes después de rodaje.	2-10
	Engine is overheated. Motor sobrecalentado	Allow engine to cool and then restart. Deje enfriar y vuelva a intentarlo	2-8
	Do you have a clutch problem? ¿Problemas de embrague?	See section 3-10 on clutch maintenance. Vea la sección 3-10 mantenimiento del embrague	3-10
	Throttle servo is improperly set up. Mal ajuste del servo del acelerador	Set servo to neutral and reset linkage according to radio and model manufacturer's specifications. Coloque el servo en neutro y reajuste el varillaje siguiendo las instrucciones de la emisora.	2-6
	Do you have a drivetrain problem? ¿Problemas de transmisión?	Check drivetrain for damage. Compruebe la transmisión	3-6 3-7 3-10 3-11 3-12
Engine Running, But Car Doesn't Move. El motor funciona pero el coche no se mueve	Are the brakes stuck? ¿Frenos bloqueados?	See section 2-6. Make sure there is no brake drag at neutral. Vea la sección 2-6. Compruebe que no esta frenado en neutro	2-6
	Do you have a clutch problem? ¿Problemas de embrague?	See section 3-10 on clutch maintenance. Vea la sección 3-10 mantenimiento del embrague	3-10
	Receiver battery capacity is low. Batería receptor baja	Exchange receiver battery. Cambie o recargue las baterías	3-5
	Gear mesh is incorrect. Transmisión mal engranada	See section 3-6 on centre gear box maintenance. Vea sección 3-6, mantenimiento de la caja transmisión central	3-6
	Do you have a drivetrain problem? ¿Problemas de transmisión?	Check drivetrain for damage. Compruebe la transmisión	3-6 3-7 3-10 3-11 3-12
Erratic Control. Fallos de control	Weak batteries in transmitter and receiver. Baterías descargadas en emisor y receptor	Install fresh batteries. Reemplace las baterías	3-5
	Improper antenna on transmitter or model. Antena no extendida en transmisor o receptor	Fully extend antenna. Extienda la antena	3-5
	Brake does not work. Frenos no funcionan	See section 2-6 on linkage setup. Vea sección 2-6 ajuste del varillaje	2-6

3 Maintenance / Mantenimiento

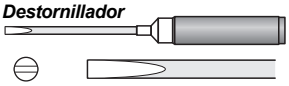
After running you should clean the chassis and perform routine maintenance to keep the car in good running order.
Después de rodar limpie el chasis y siga las instrucciones de mantenimiento para dejar el coche preparado para los siguientes usos

Necessary for Maintenance / Material necesario

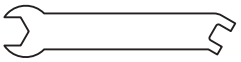
Screwdriver / Destornillador



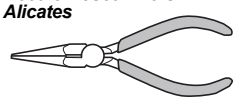
Screwdriver / Destornillador



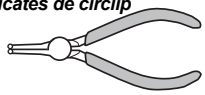
Z960
Turnbuckle Wrench 4mm / 5.5mm
Llave tirantes



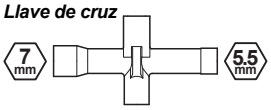
Needle Nosed Pliers / Alicates



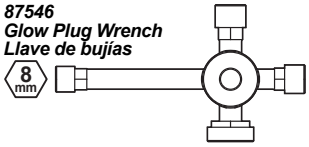
Snap Ring Pliers / Alicates de circlip



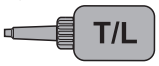
Z950
Cross Wrench
Llave de cruz



87546
Glow Plug Wrench
Llave de bujías

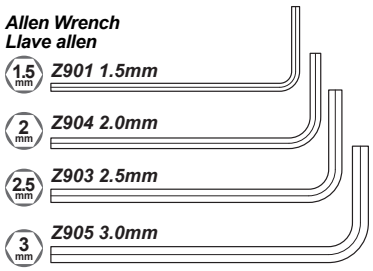


Thread Lock / Fijatornillos



30035 (JP)
Instant Cement
Pegamento inst.

Allen Wrench / Llave allen



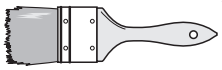
Z164
Grease
Grasa

Z190
Air Filter Oil
Aceite filtro aire

9062 (US,EU)
9063 (JP)
Nitro Car Cleaner
Spray limpiador

39014 (JP)
Oil Spray
Aceite en spray

Brush / Pincel



Rag / Trapo

3-1 Maintenance Chart / Tabla mantenimiento

For maintenance schedule, refer to right side of the chart. After running, clean the chassis and check all moving parts for damage. If any parts are broken or damaged, repair or replace them before the next run.
Regular maintenance is necessary to prevent damage to the car and maintain its performance.

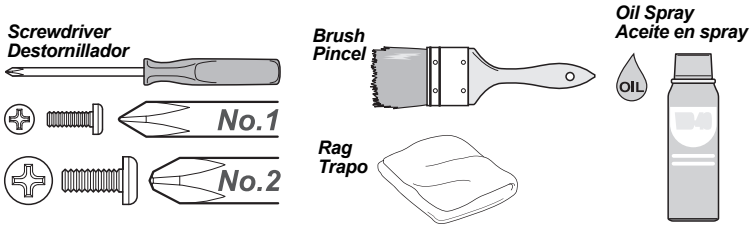
Para la guía de mantenimiento siga la columna de la derecha. Después de rodar limpie el chasis y compruebe el estado de las partes en movimiento. Si alguna parte esta dañada o rota, repárela o sustitúyala antes del siguiente uso.
El mantenimiento regular es necesario para evitar averías y mantener las prestaciones.

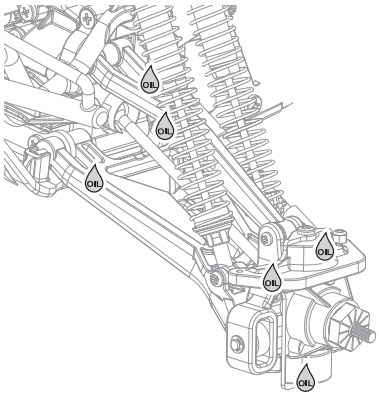
1 Every 1 Tank / Cada deposito	5 Every 5 Tank / Cada 5 depósitos	10 Every 10 Tank / Cada 10 depósitos	Maintenance Item / Mantenimiento de:	Maintenance Time / Tiempo de mantenimiento	Reference Section / Sección	
●	●	●	Chassis Maintenance / Mantenimiento chasis	Clean the chassis after every run. / Limpie el chasis después de cada uso	3-2	page 19
●	●	●	Wheel Maintenance / Mantenimiento ruedas	Clean the wheels after every run. / Limpielas después de cada uso	3-3	page 19
●	●	●	Air Filter Maintenance / Mantenimiento filtro aire	Clean the air filter after every run. / Limpielo después de cada uso	3-4	page 20
	●	●	Radio Maintenance / Mantenimiento radio	Check the battery before every run. / Compruebe las baterías antes de cada uso	3-5	page 21
	●	●	Spur Gear Maintenance / Mantenimiento coronas	Maintain Spur Gear before every run. / Compruébela antes de cada uso	3-6	page 22
		●	2 Speed Setup / Ajuste cambio 2 velocidades	Maintain 2 Speed before every run. / Contrólelo antes de cada uso	3-7	page 23
	●	●	Engine and Fuel Tank Maintenance / Mantenimiento motor y deposito	Maintain Engine after each day's running. / Revíselos después de cada día de uso	3-8	page 24
		●	Engine and Tuned Pipe Maintenance / Mantenimiento motor y escape	Maintain Engine after each day's running. / Compruébelo después de cada día de uso	3-9	page 25
		●	Clutch Maintenance / Mantenimiento embrague	Maintain Clutch after each day's running. / Compruébelo después de cada día de uso	3-10	page 26
	●	●	Gear Box and Differential Maintenance / Mantenimiento diferencial y transmisión	Maintain Gear Box after each day's running. / Compruébelo después de cada día de uso	3-11	page 27
		●	Front and Rear Differential Maintenance / Mantenimiento diferenciales	Maintain Differential after each day's running. / Compruébelos después de cada día de uso	3-12	page 28
	●	●	Shock Maintenance / Mantenimiento amortiguadores	Check the Shocks before every run. / Verifíquelos antes de cada uso	3-13	page 29
		●	Servo Maintenance / Mantenimiento servos	Check the Linkage before every run. / Compruebe el varillaje antes de cada uso	3-14	page 30
		●	Throttle Linkage Assembly / Mantenimiento varillaje acelerador	Check the Linkage before every run. / Verifíquelo antes de cada uso	3-15	page 31
		●	Engine Maintenance / Mantenimiento motor	Maintain Engine after each day's running. / Compruébelo después de cada día de uso	3-16	page 32
		●	HPI Roto Start System / HPI Roto Start	Check the system before every run. / Compruebe el sistema antes de cada uso	3-17	page 34

3-2 Chassis Maintenance
Mantenimiento chasis

After running, clean the car and lubricate these points.
Replace damaged parts, check that all the screws are tight.

Después de usarlo,limpie el coche y lubrique los siguientes puntos. Sustituya las partes dañadas y reapriete todos los tornillos.

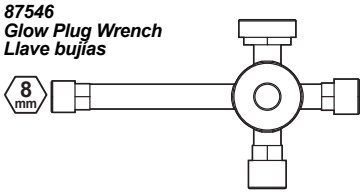


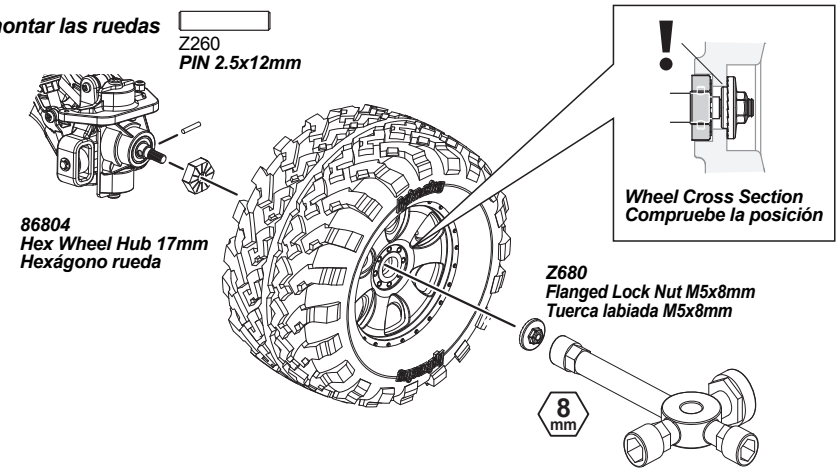


3-3 Wheel Maintenance
Mantenimiento ruedas

Wheel Removal and Installation Montaje y desmontaje ruedas

Use 17mm glow plug wrench to remove and install wheels.
Use la llave de 17mm de la llave de bujías para desmontar y montar las ruedas

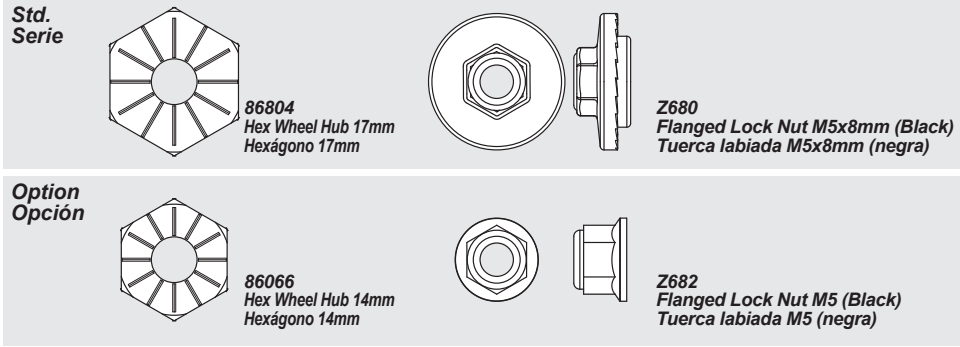




Wheel Hub Selection Elección hexágono

Savage X standard hex hub is 17mm hex hub. 14mm hex hub is also included for use with optional wheels.

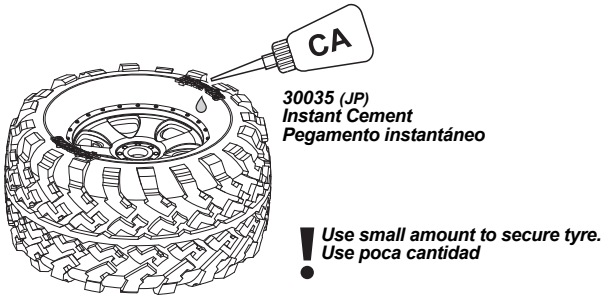
El Savage X esta equipado de hexágono de 17mm, están también incluidos de 14mm para llantas opcionales



Re-Glue Wheel Pegado ruedas

Make sure the tyre is secure on the wheel. Re-glue if necessary.

Asegúrese que el neumático esta bien pegado.
Vuelva a pegarlo si es necesario



3-4 Air Filter Maintenance
Mantenimiento filtro de aire

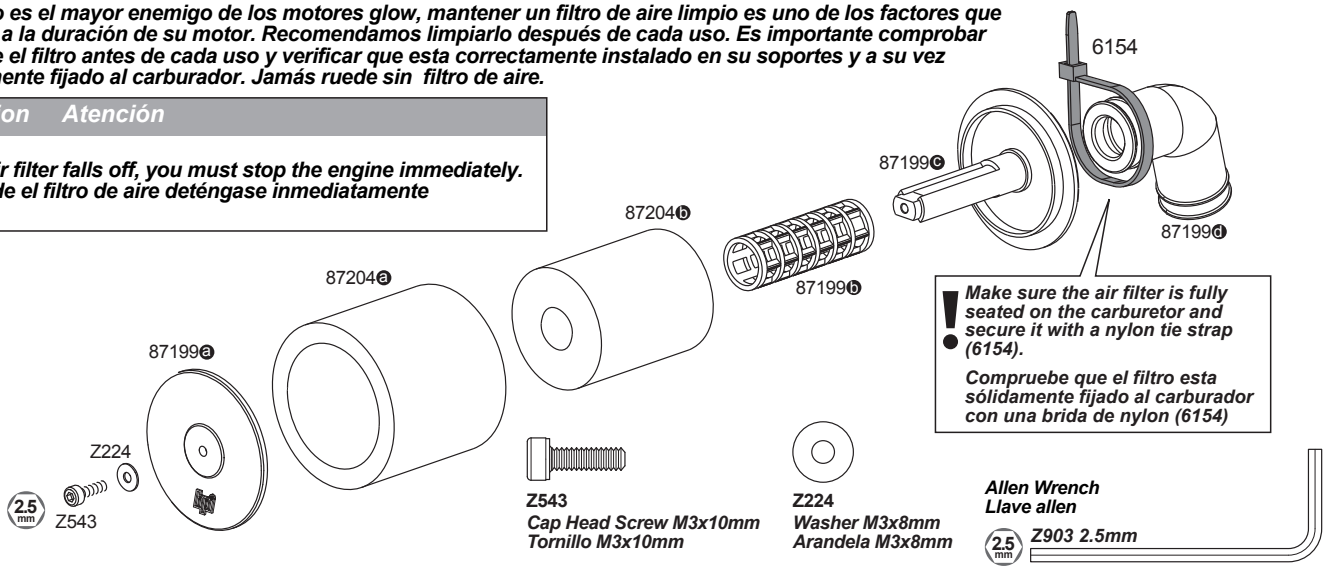
Proper Air Filter Maintenance Manténgalo limpio

Dirt is the biggest enemy of a nitro engine and proper air filter maintenance is one of most important factors that will affect your engines longevity. We recommend cleaning the element after every run. It is always a good habit to check the element after every run to make sure it is properly seated in the filter body and that the body is fully seated on the carburetor. Never run the engine without the air filter.

El polvo es el mayor enemigo de los motores glow, mantener un filtro de aire limpio es uno de los factores que afectan a la duración de su motor. Recomendamos limpiarlo después de cada uso. Es importante comprobar siempre el filtro antes de cada uso y verificar que esta correctamente instalado en su soportes y a su vez sólidamente fijado al carburador. Jamás ruede sin filtro de aire.

Attention Atención

If the air filter falls off, you must stop the engine immediately.
Si pierde el filtro de aire deténgase inmediatamente


6154
87199c
87199d
87204b
87199b
87204a
87199a
Z224
Z543
Make sure the air filter is fully seated on the carburetor and secure it with a nylon tie strap (6154).
Compruebe que el filtro esta sólidamente fijado al carburador con una brida de nylon (6154)

Z543
Cap Head Screw M3x10mm
Tornillo M3x10mm

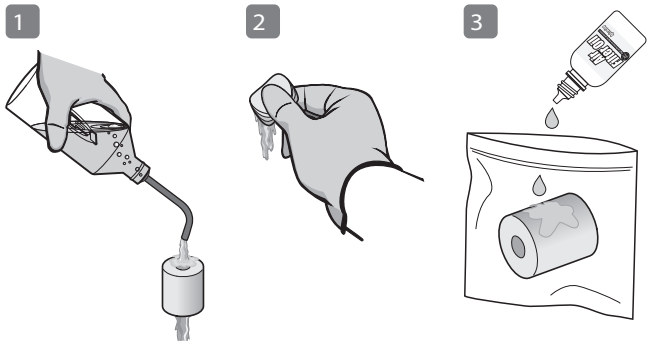
Z224
Washer M3x8mm
Arandela M3x8mm

Allen Wrench
Llave allen
Z903 2.5mm

Cleaning the Filter Element Limpieza filtro aire

Remove and clean the air filter with nitro fuel when dirty. Spray fuel through the clean side to ensure proper dirt removal. Squeeze the filter to remove excess fuel. To re-coat the air filter with oil, place the element in a plastic bag with several drops of air filter oil. Using your fingers, work the oil into the element making sure it is evenly distributed.

Retire y limpie el filtro de aire . Rocíe gasolina por la parte limpia del filtro para asegurar una correcta limpieza. Seque el filtro del exceso de gasolina. Para volver a aceitar el filtro de aire, coloque dentro de una bolsa de plástico con aceite de filtro. Apriételo con los dedos asegurándose que el aceite esta correctamente repartido.



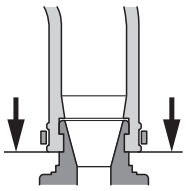
Z190
Air Filter Oil
Aceite filtro aire

Reinstalling the Filter Element Recolocacion filtro aire

After properly cleaning the filter element make sure it is reinstalled correctly. Make sure there are no gaps between the element and body. Make sure the filter is fully seated on the carburetor and secure it with a tie strap. Never run the engine without the air filter.

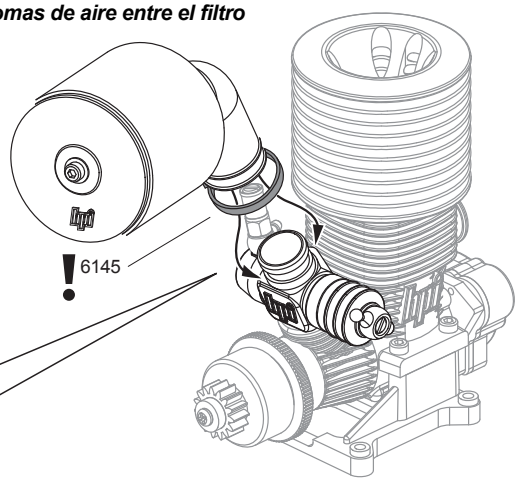
Después de hacer limpiado el filtro instálelo correctamente. Asegúrese que no deja tomas de aire entre el filtro y el carburador. Fíjelo con una brida de nylon. No ruede jamás sin filtro de aire.

Attention Atención

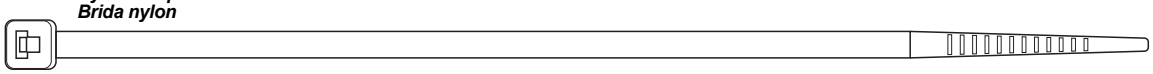


Make sure the air filter is fully seated on the carburetor and secure it with a nylon tie strap (6154).

Compruebe que el filtro esta sólidamente fijado al carburador con una brida de nylon (6154)

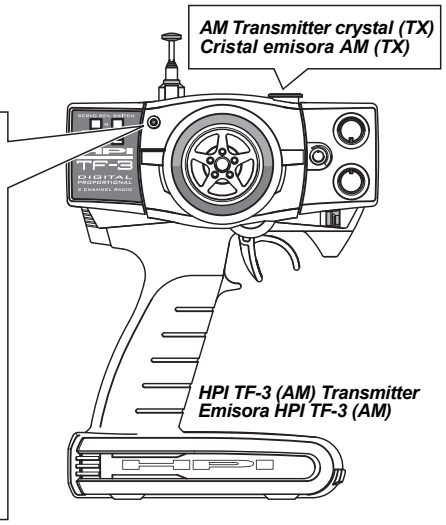


6154
Nylon Strap
Brida nylon



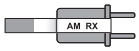
Transmitter Emisora

The crystal can be replaced to change frequencies.
Do not use same frequency as other cars.
Transmitter antenna must be extended.
Los cristales pueden cambiarse para variar la frecuencia.
No use la misma frecuencia que los demás usuarios.
Extienda la antena completamente.



AM Transmitter crystal (TX)
Cristal emisora AM (TX)

AM Receiver crystal (RX)
Cristal receptor (RX)



! Do not use FM crystals.
No use cristales FM

Band (US, EU) Banda			Frequency Frecuencia
1. BROWN	-Marrón	(#80601)	26.995 MHz
2. RED	-Rojo	(#80602)	27.045 MHz
3. ORANGE	-Naranja	(#80603)	27.095 MHz
4. YELLOW	-Amarillo	(#80604)	27.145 MHz
5. GREEN	-Verde	(#80605)	27.195 MHz
6. BLUE	-Azul	(#80606)	27.255 MHz

Battery level indicator
Nivel de carga

Good Batteries
Buena carga

Low Batteries
Carga baja

Exchange Batteries
Cambie baterías
When the battery level indicator (LED) blinks in red, replace the batteries with new ones immediately.
Cuando el indicador (led) esta rojo, cambie las baterías inmediatamente

Receiver and Servo Receptor y servo

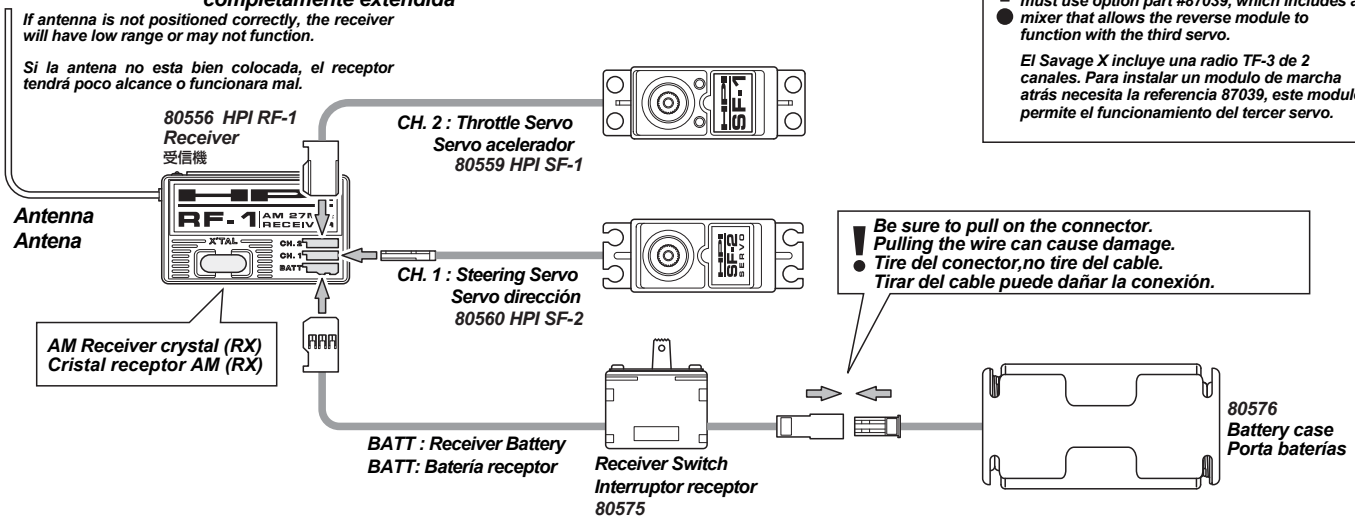
Receiver Connections **See section 2-6 on linkage set up. Receiver antenna must be extended.**
Conexión al receptor **Vea la sección 2-6 , ajuste varillaje. La antena del receptor debe estar completamente extendida**

! The Savage X includes a two-channel TF-3 Radio. When installing a reverse module, you must use option part #87039, which includes a mixer that allows the reverse module to function with the third servo.

El Savage X incluye una radio TF-3 de 2 canales. Para instalar un modulo de marcha atrás necesita la referencia 87039, este modulo permite el funcionamiento del tercer servo.

If antenna is not positioned correctly, the receiver will have low range or may not function.

Si la antena no esta bien colocada, el receptor tendrá poco alcance o funcionara mal.



Receiver Battery Baterías receptor

4x AA Alkaline Batteries
Baterías alcalinas AA

Attention Atención

! **Only use alkaline batteries in the receiver.**
Do not mix batteries of different ages or types.
If steering response is slow, replace batteries as soon as possible.

Use solo baterías alcalinas en el receptor.
No mezcle baterías de diferentes tipos.
Si la respuesta de la dirección es lenta , cambie las baterías inmediatamente.

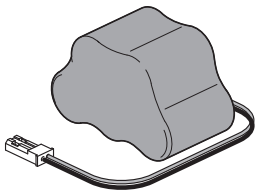
Optional Battery and Charger Cargador y baterías opcionales

For extended running and less down time, we recommend #2012 Hump Battery Pack and #HB70452 GT Escape Charger.

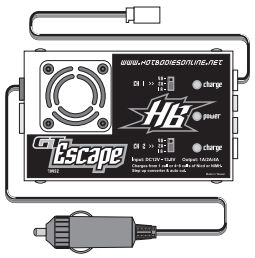
Para aumentar la autonomía, recomendamos la batería opcional 2012 y el cargador HB70452 GT Escape

2012
Hump Battery Pack For Receiver
(6V 1200mAh/Ni-MH)

Batería para receptor
(6v 1200mAh/-Mh)



HB70452
GT Escape Charger
Cargador GT Escape



12V DC power source necessary. Two batteries can be charged at the same time.
El cargador se alimenta de una fuente de 12v. El cargador puede cargar dos baterías a la vez.

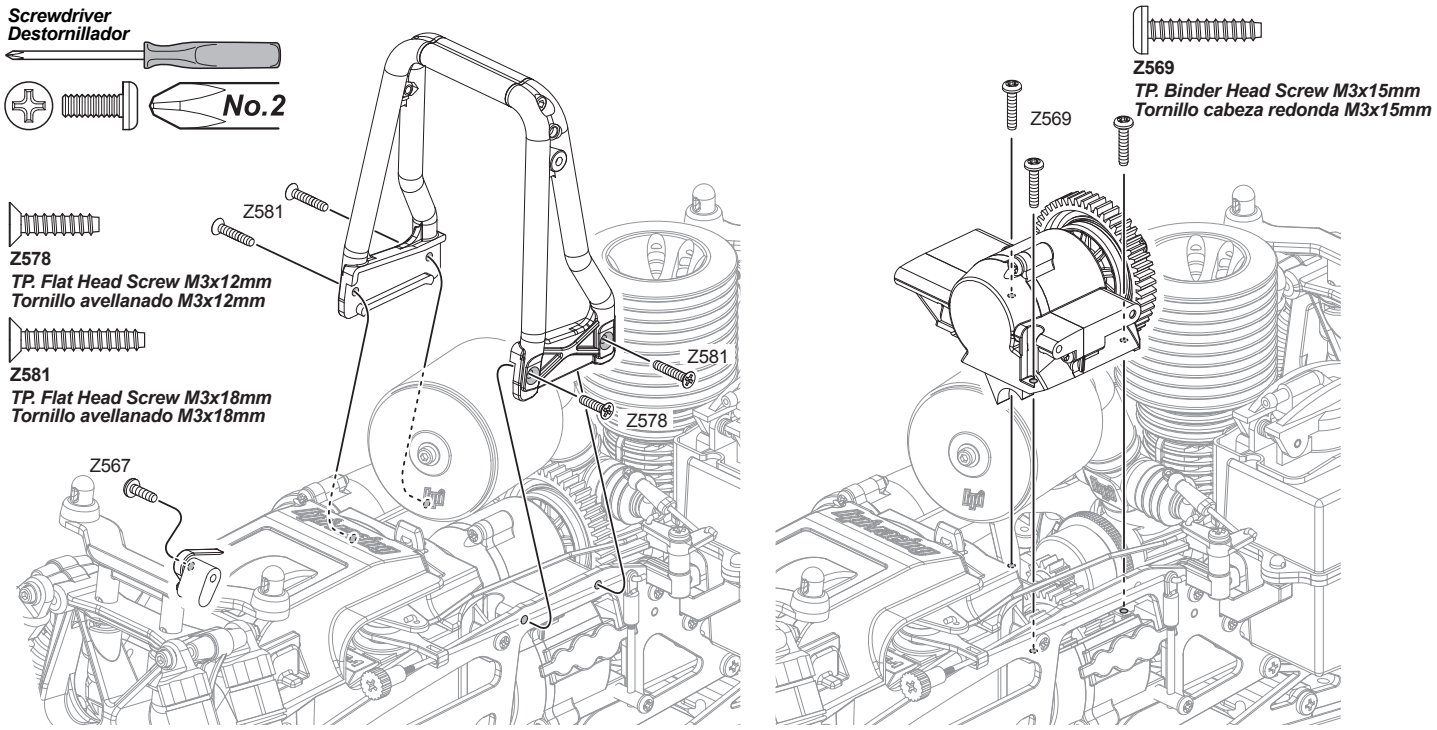
This charger is powered by a standard 12V lighter socket.
This charger is designed for Ni-MH battery.

Este cargador esta equipado con una toma de corriente de mechero de automóvil.
Este cargador esta diseñado solo para cargar baterías Ni-Mh

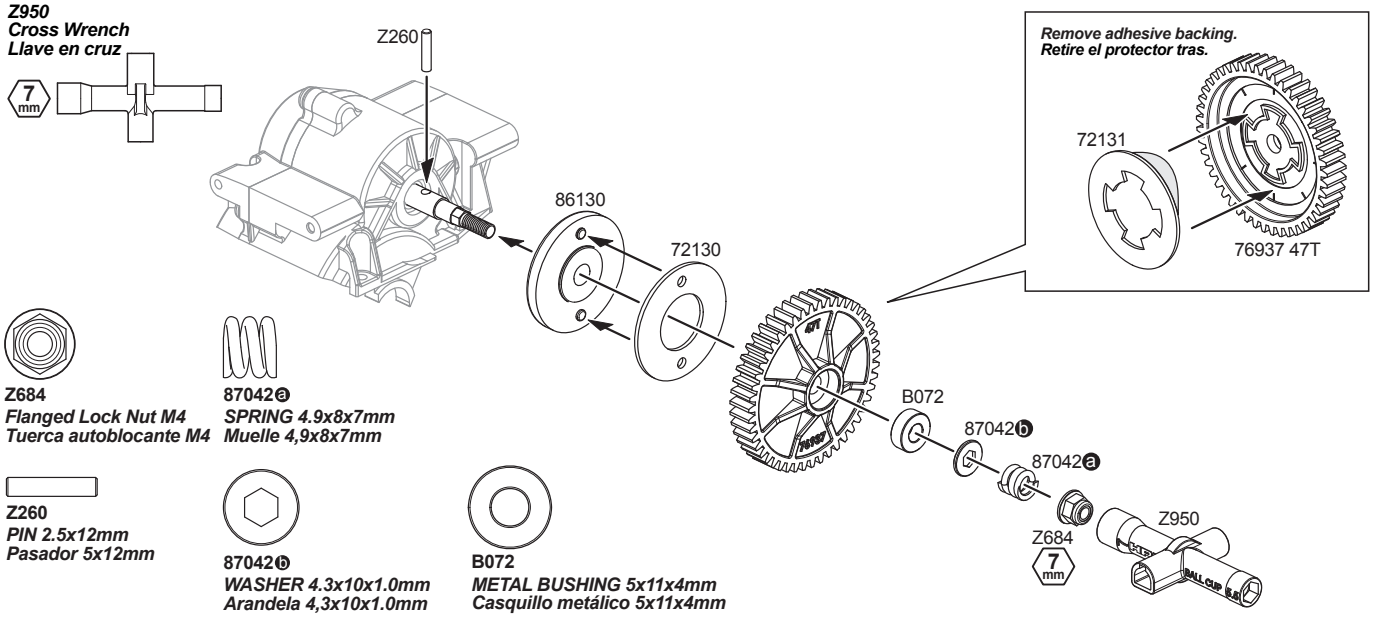
3-6 Spur Gear Maintenance / Mantenimiento corona

5-1 *Refer to Exploded View / Ver despiece*

Upper Center Gear Box Removal and Installation Montaje y desmontaje transmisión central superior.



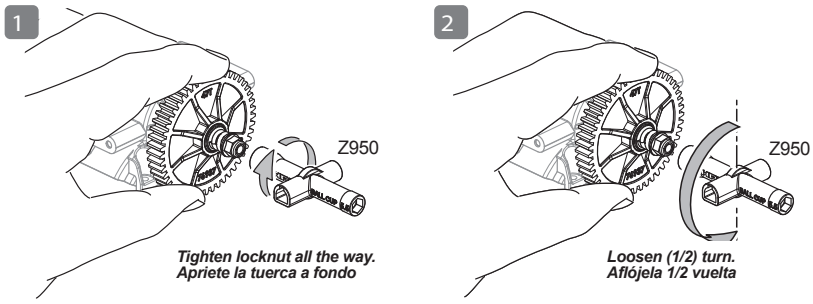
Super Gear Removal and Installation Montaje y desmontaje corona central



Adjusting the Slipper Clutch / Ajuste embrague

The spur gear should slip when firm pressure is applied. If the slipper clutch is too tight it may damage the drive train. After running, if slipper clutch is too lose, tighten 1/4 turn.

La corona central debe deslizar ligeramente con una fuerte presión. Si el embrague esta demasiado apretado puede dañarse la transmisión. Si después de rodar el embrague esta demasiado suelto, apriételo 1/4 de vuelta.

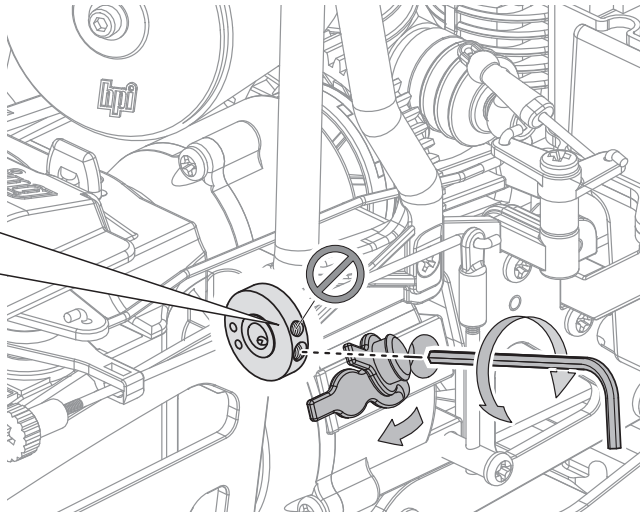


2 Speed Setup Ajuste cambio 2 velocidades

You can adjust the shift point by turning the screw.
Ajuste el momento de cambio mediante el tornillo

Allen Wrench
Llave allen

2 mm *Z904 2.0mm*



Counter clockwise for earlier gear shift.
Afloje para un cambio rápido

Clockwise for later gear shift.
Apriete para cambio mas tarde

Attention Atención

! ***Always stop your engine before making adjustment. Make your adjustments in 1/4 turn increments. If gear shift is too soon, then turn clockwise. If gear shift is too late, then turn counter clockwise.***

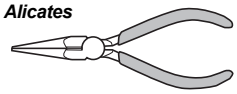
Ajuste siempre con el motor parado. Realice los ajustes en pasos de 1/4 de vuelta. Si cambia muy rápido apriete el tornillo. Si cambia muy tarde afloje el tornillo

Transmission Gear Removal and Installation Montaje y desmontaje caja transmisión

5-1 *Refer to Exploded View Remove screws in A and B in section 5-1.*
Vea el despiece Retire los tornillos en los pasos A y B de la sección 5-1

Screwdriver
Destornillador

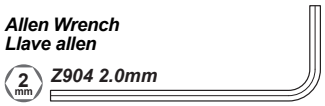
Needle Nosed Pliers
Alicates



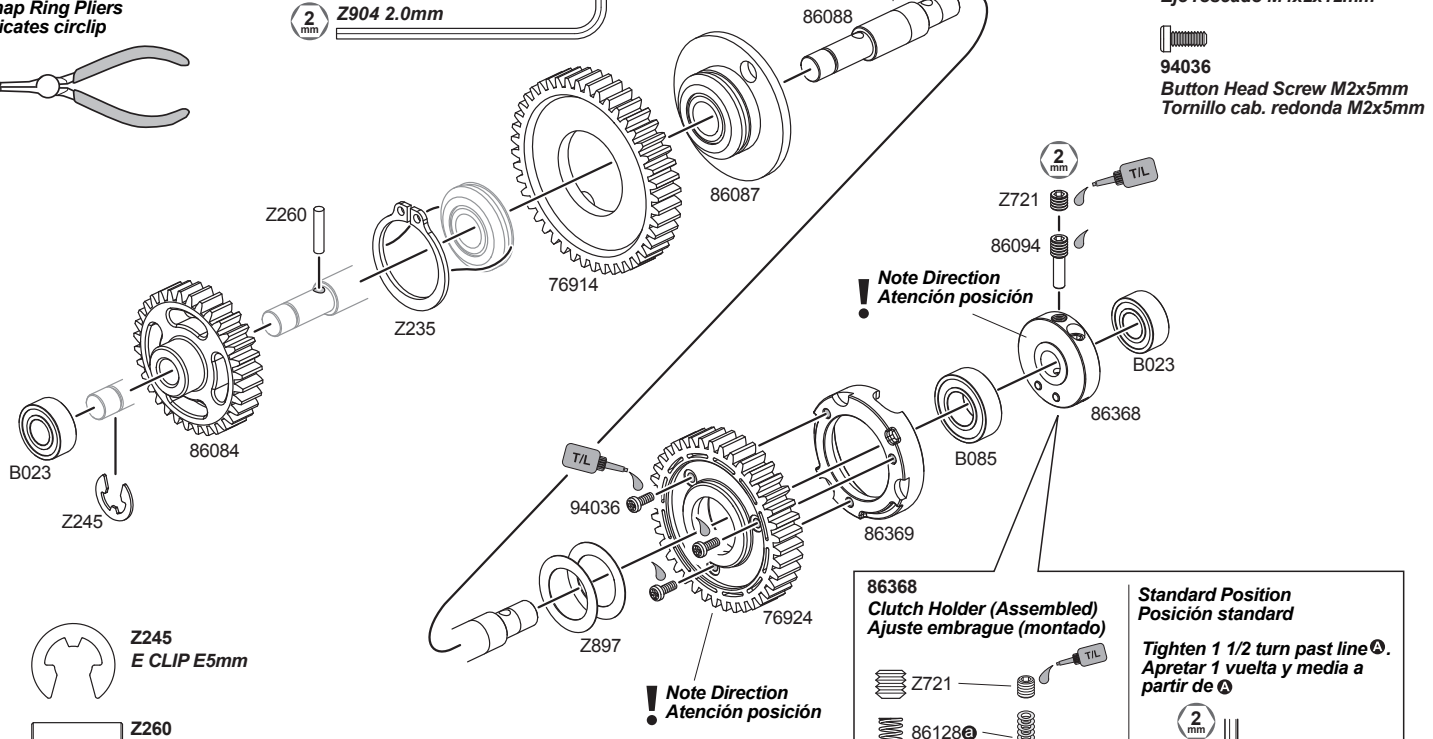
Thread Lock
Fijatuercas

Allen Wrench
Llave allen

2 mm *Z904 2.0mm*



Snap Ring Pliers
Alicates circlip



Z721
Set Screw M4x4mm
Tornillo M4x4mm

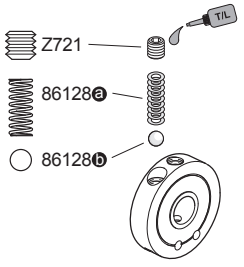
86094
Screw Shaft M4x2x12mm
Eje roscado M4x2x12mm

94036
Button Head Screw M2x5mm
Tornillo cab. redonda M2x5mm

Z245
E CLIP E5mm

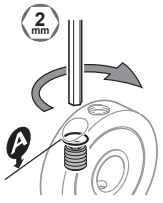
Z260
PIN 2.5x12mm

86368
Clutch Holder (Assembled)
Ajuste embrague (montado)



Standard Position
Posición standard

Tighten 1 1/2 turn past line Ⓐ.
Apretar 1 vuelta y media a partir de Ⓐ

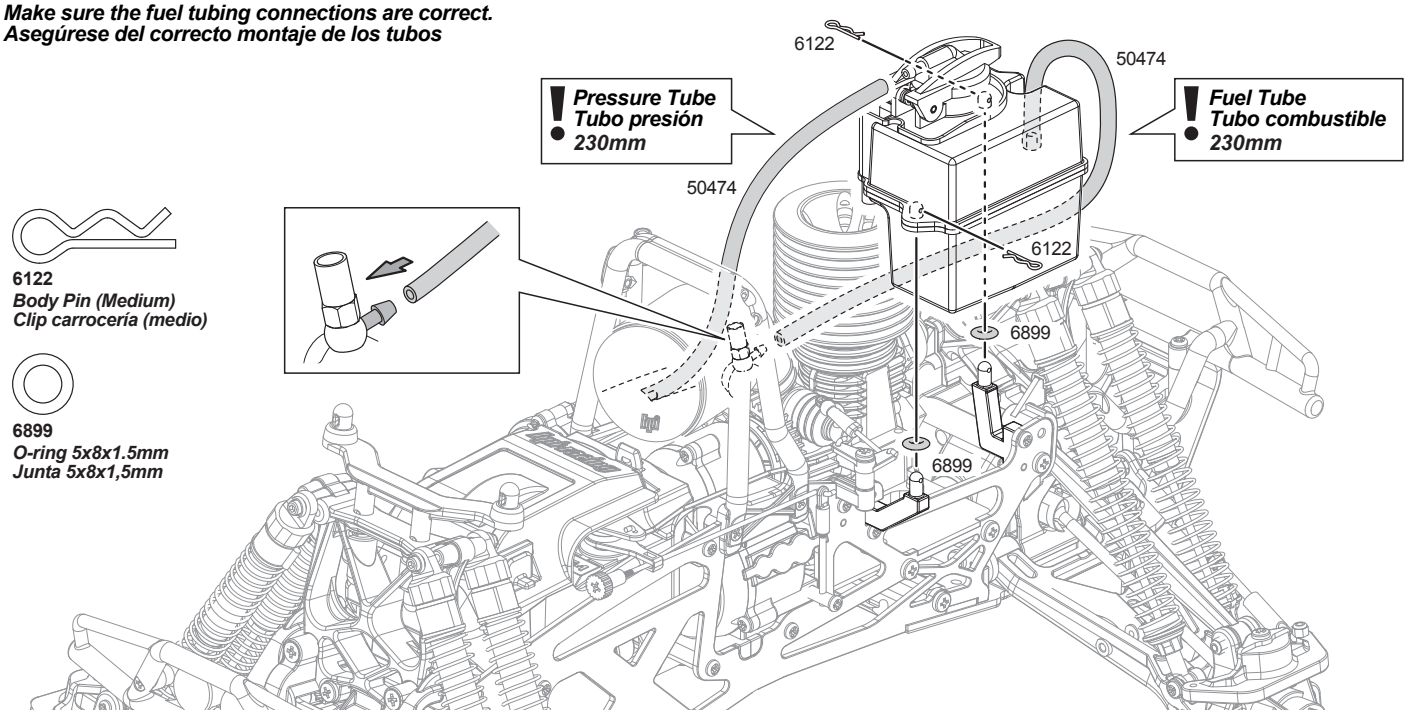


Engine and Fuel Tank Maintenance
Mantenimiento motor y deposito

5-1 5-4 Refer to Exploded View
Vea despiece

Fuel Tank Removal and Installation Montaje y desmontaje deposito

Make sure the fuel tubing connections are correct.
Asegúrese del correcto montaje de los tubos

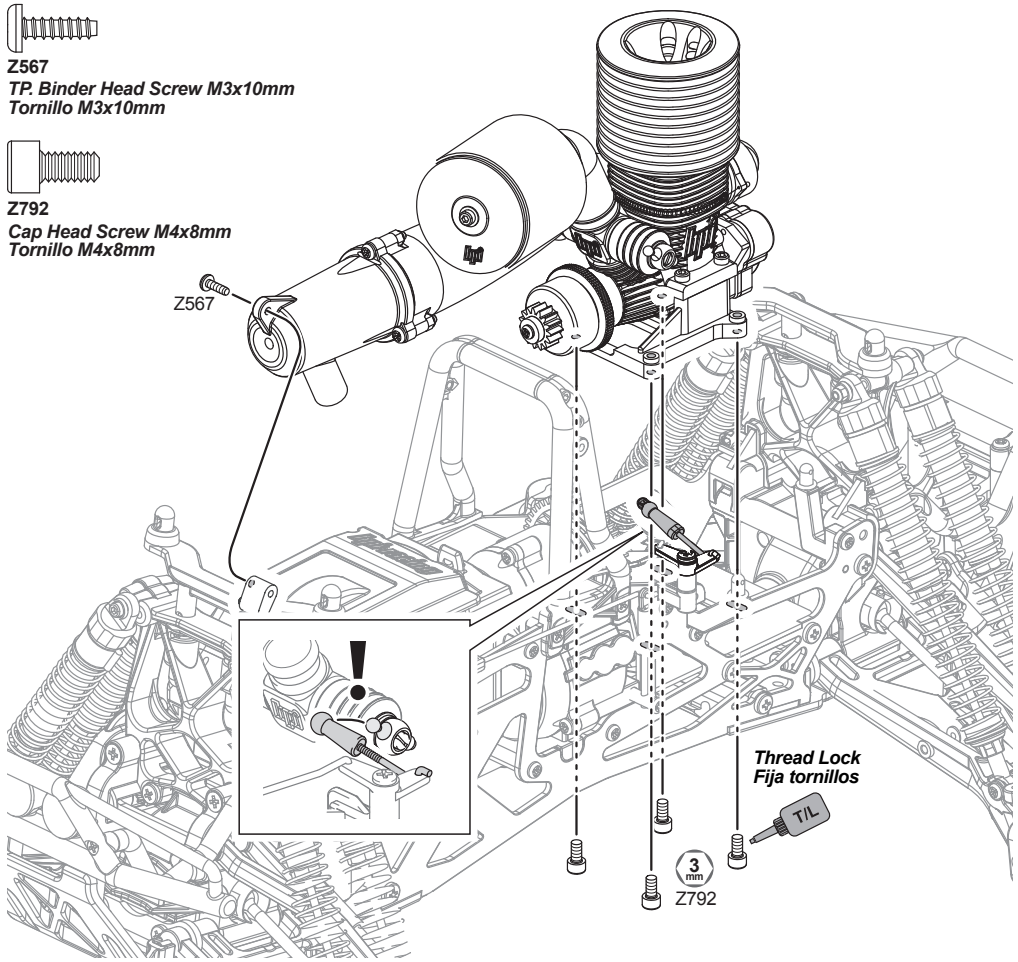


6122
Body Pin (Medium)
Clip carrocería (medio)

6899
O-ring 5x8x1.5mm
Junta 5x8x1,5mm

Engine Removal and Installation Montaje y desmontaje motor

Make sure the throttle linkage connections are correct.
Compruebe que el varillaje esta bien colocado



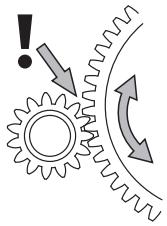
Z567
TP. Binder Head Screw M3x10mm
Tornillo M3x10mm

Z792
Cap Head Screw M4x8mm
Tornillo M4x8mm

Proper Spur Gear Mesh.
Engranaje correcto

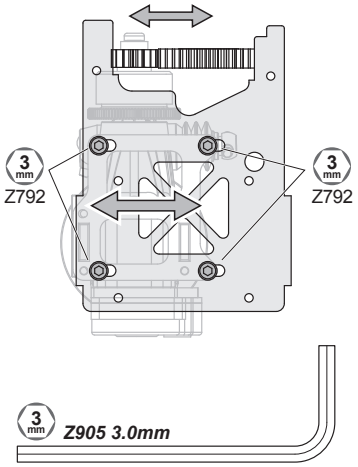
Adjust the engine mount screws so gears mesh smoothly.

Ajuste el engranaje mediante los tornillos del motor



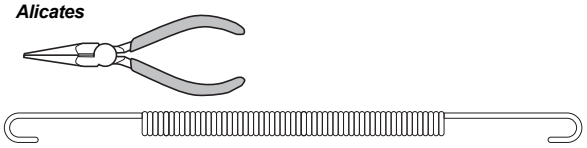
Adjust the engine placement for proper gear mesh.

Mueva el motor para lograr un correcto engranaje

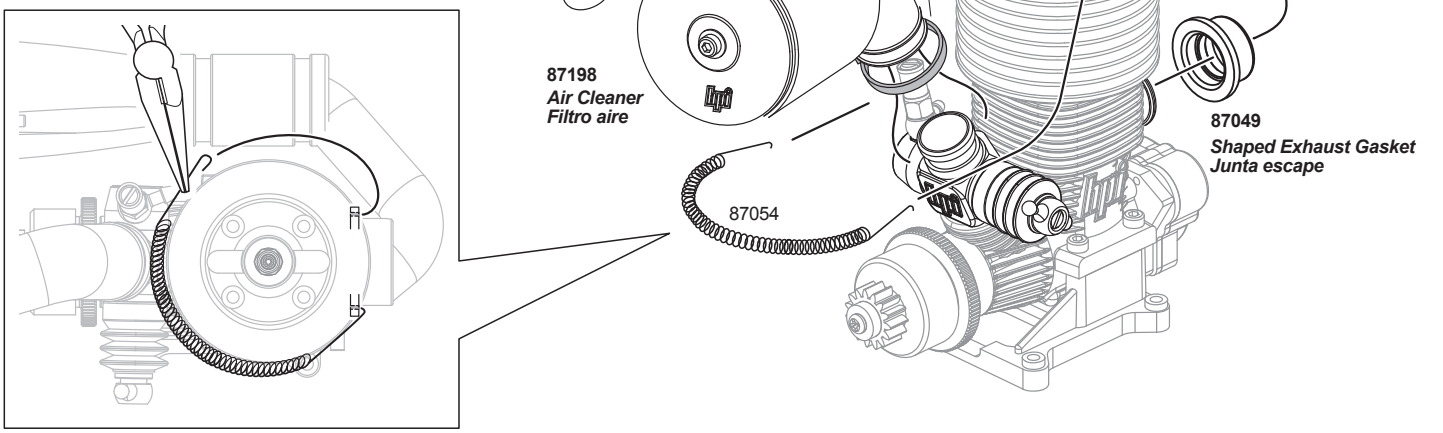


Tuned Pipe Removal and Installation *Montaje y desmontaje escape*

Needle Nosed Pliers
Alicates



87054
Exhaust Manifold Spring
Muelle escape

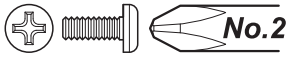


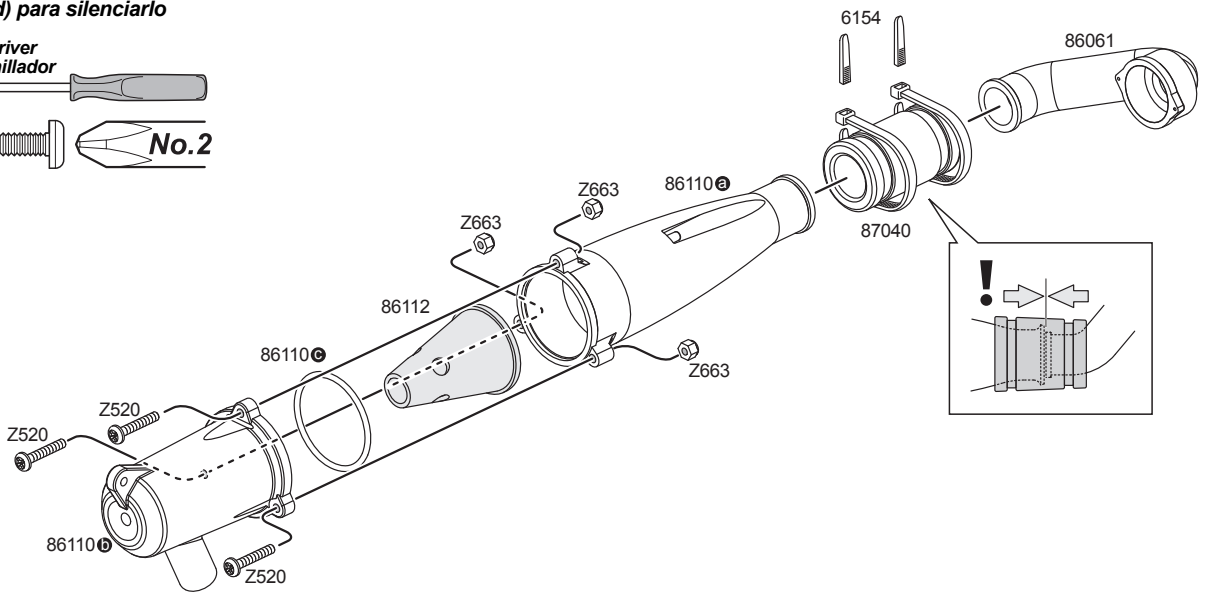
Tuned Pipe Assembly *Montaje escape*

If you think the exhaust is too loud, you can install the included inner cone (#86112)to make it quieter.

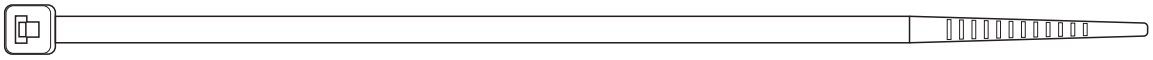
Si su escape hace demasiado ruido, coloque el cono interior (86610d) para silenciarlo

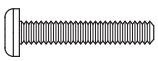
Screwdriver
Destornillador





6154
Nylon Strap
Brida nylon





Z520
Binder Head Screw M3x18mm
Tornillo M3x18mm

Z663
Lock Nut M3
Tuerca M3

3-10 Clutch Maintenance / Mantenimiento embrague

5-4 Refer to Exploded View / Ver despiece

Screwdriver / Destornillador — No.2

Screwdriver / Destornillador

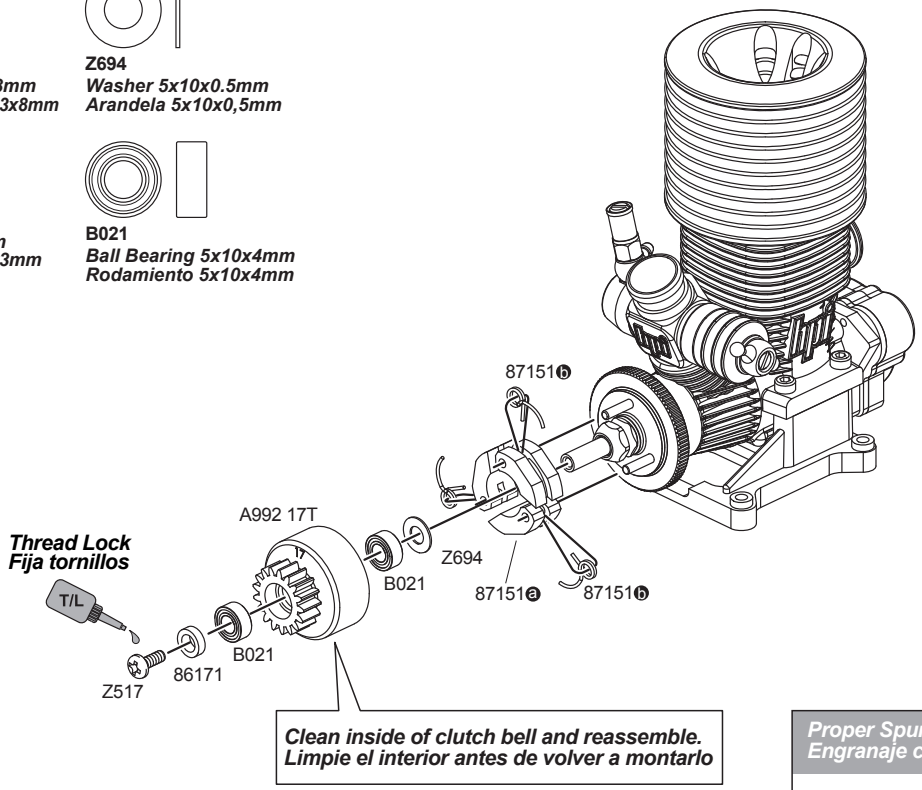
Z517
Binder Head Screw M3x8mm
Tornillo cabeza redonda M3x8mm

Z694
Washer 5x10x0.5mm
Arandela 5x10x0,5mm

86171
Metal Bushing 5x7.5x3mm
Casquillo metálico 5x7,5x3mm

B021
Ball Bearing 5x10x4mm
Rodamiento 5x10x4mm

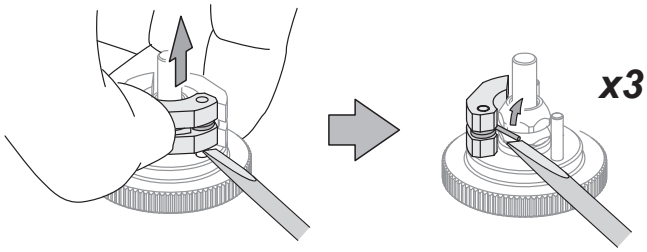
87151ⓐ
Clutch Spring
Muelle embrague



Clean inside of clutch bell and reassemble.
Limpie el interior antes de volver a montarlo

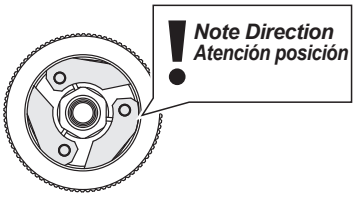
Disassemble Clutch Shoe — Desmontaje embrague

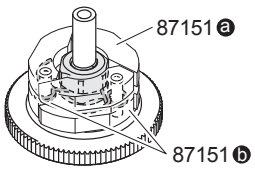
! *Use flathead screwdriver*
Use un destornillador plano

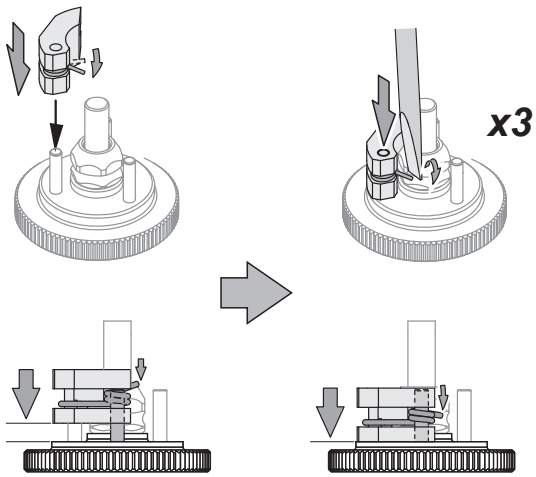


Assemble Clutch Shoe — Montaje zapatas embrague

! *Use flathead screwdriver*
Use un destornillador plano

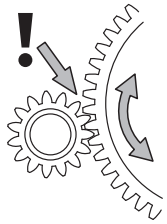




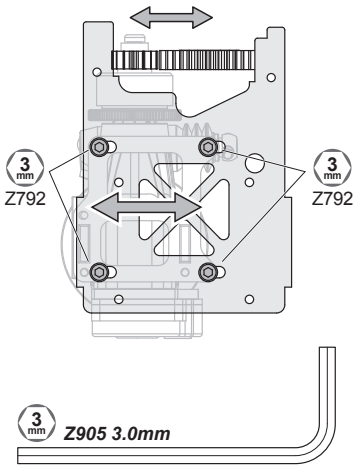


Proper Spur Gear Mesh. / Engranaje correcto

Adjust the engine mount screws so gears mesh smoothly.
Ajuste la transmisión para que gire libremente a través de los tornillos del motor.



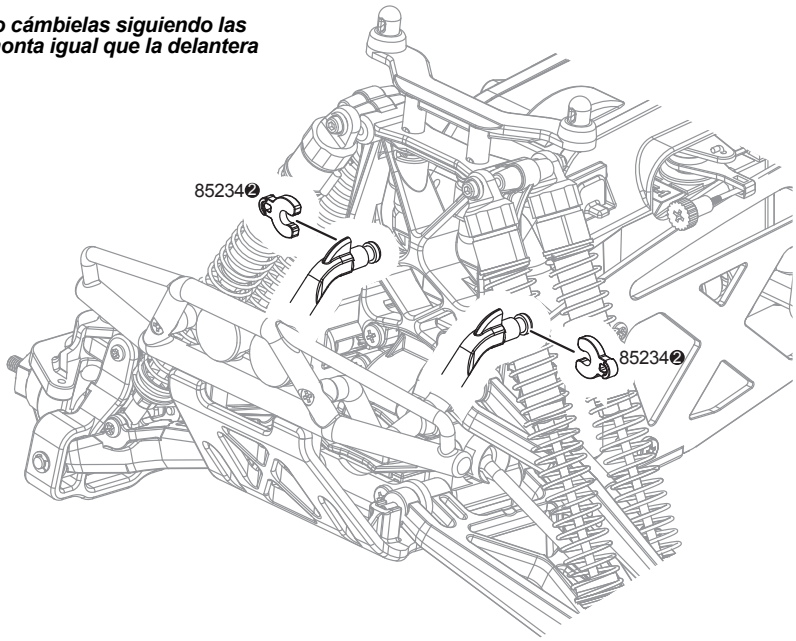
Adjust the engine placement for proper gear mesh.
Ajuste la posición del motor para un correcto engranaje.



Bumper Holder Removal and Installation *Montaje y desmontaje soporte parachoques*

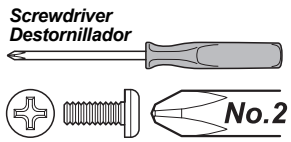
If parts are damaged, repair or replace them according to the instruction below.
Rear gear box removal is same as front.

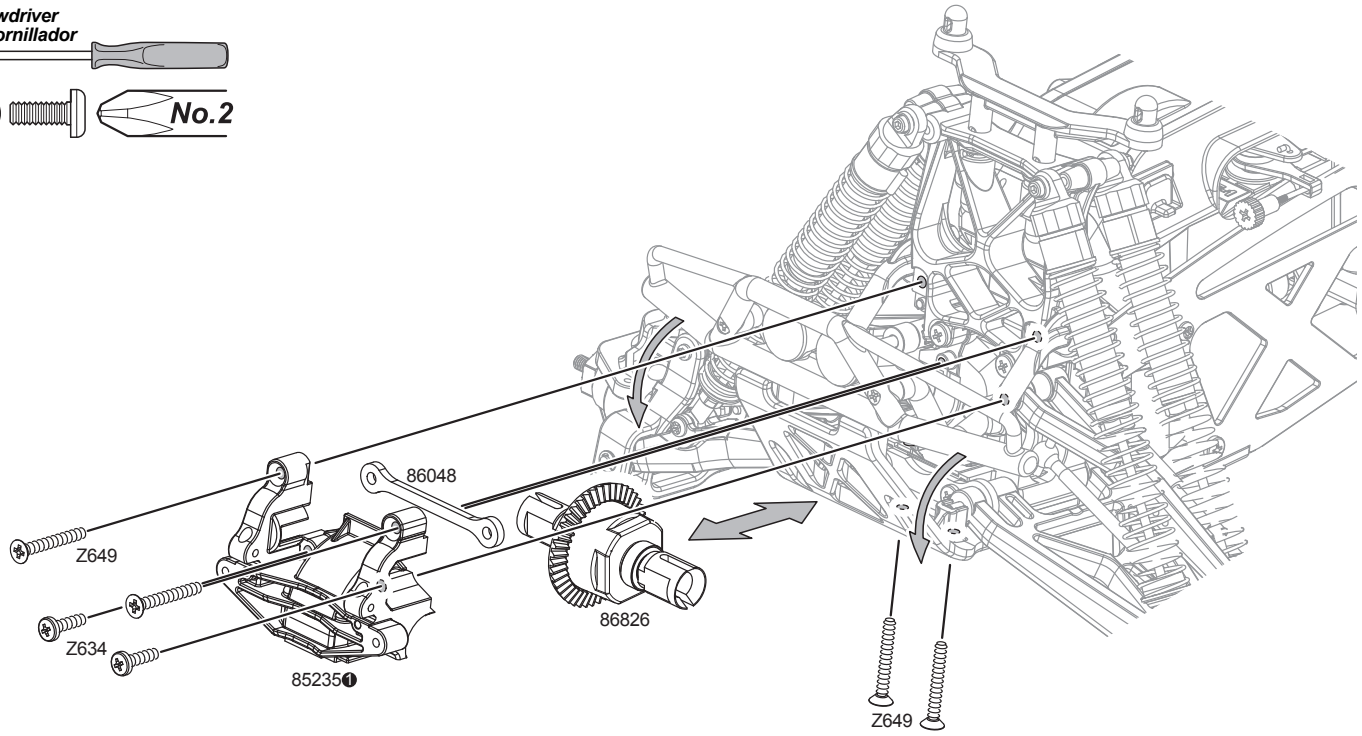
Si las piezas están dañadas, repárelas o cámbielas siguiendo las instrucciones. La parte trasera se desmonta igual que la delantera



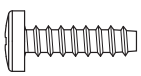
Differential Gear Removal and Installation *Montaje y desmontaje del diferencial*

If parts are damaged, repair or replace them according to the instruction below.
Rear gear box removal is same as front.
Si las piezas están dañadas, repárelas o cámbielas siguiendo las instrucciones.
La parte trasera se desmonta igual que la delantera

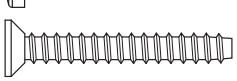




Z634
TP. Binder Head Screw M4x15mm
Tornillo autorros. cabeza redonda M4x15mm



Z649
TP. Flat Head Screw M4x30mm
Tornillo autorros. avellanado M4x30mm



3-12 Front and Rear Differential Maintenance / Mantenimiento diferenciales del/tras.

5-3 Refer to Exploded View / Ver despiece

x2
87194
Shaft For 4 Bevel Gear Diff 4x27mm
Eje para dif. de 4 satélites 4x27mm

x4
Z529
Flat Head Screw M3x15mm
Tornillo avellanado M3x15mm

x2
Z260
Pin 2.5x12mm
Pasador 2,5x12mm

x2
Z892
Washer 5x7x0.2mm
Arandela 5x7x0,2mm

x2
B032
Ball Bearing 10x16x5mm
Rodamiento 10x16x5mm

x4
86827b
Differential Plate 8x13x2.5mm
Placa diferencial 8x13x2,5mm

x4
86827d
Washer 4x10x0.15mm
Arandela 4x10x0,15mm

x2
86827c
Washer 6x19x0.2mm
Arandela 6x19x0,2mm

x4
6811
O-Ring 6x9.5x2mm
Torica 6x9,5x2mm

x2
86032a
Bevel Gear 20 Tooth
Satélite 20 dientes

x4
86032b
Bevel Gear 10 Tooth
Satélite 10 dientes

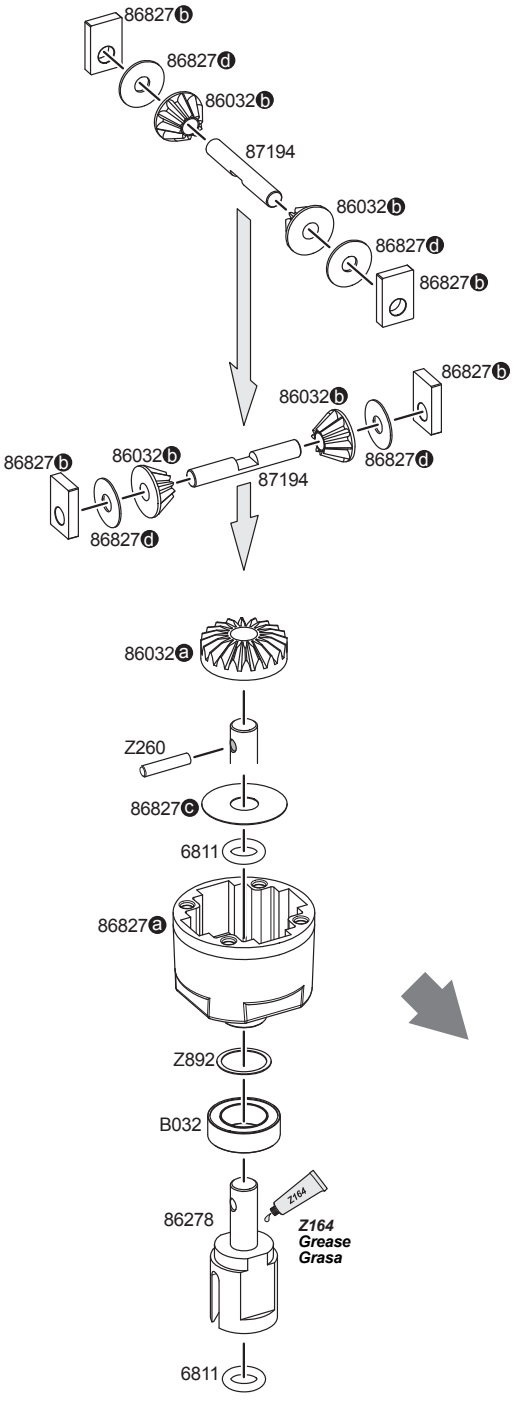
x1
86099
Diff Case Washer 0.7mm
Junta diferencial 0,7mm

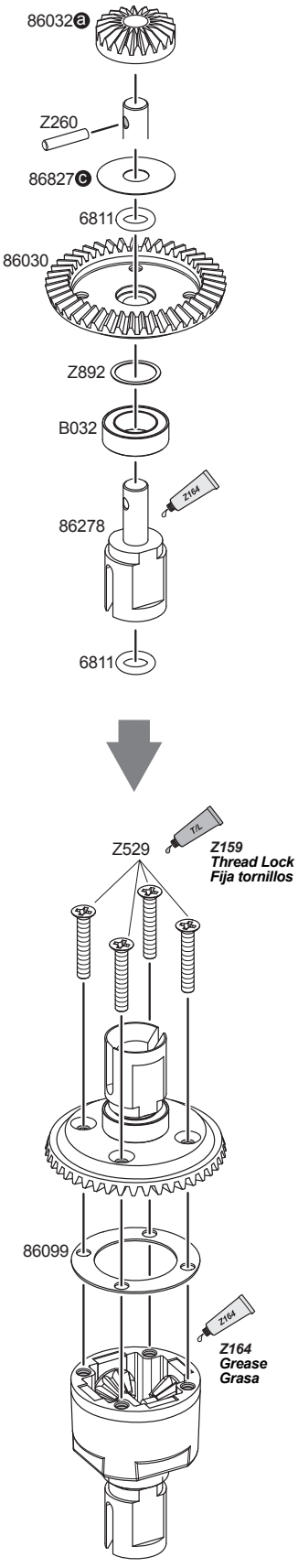
x1
86827a
Differential Case
Caja diferencial

x1
86030
Bevel Gear 43 Tooth
Corona diferencial

Screwdriver / Destornillador
No.2

Z164 Grease / Grasa
G



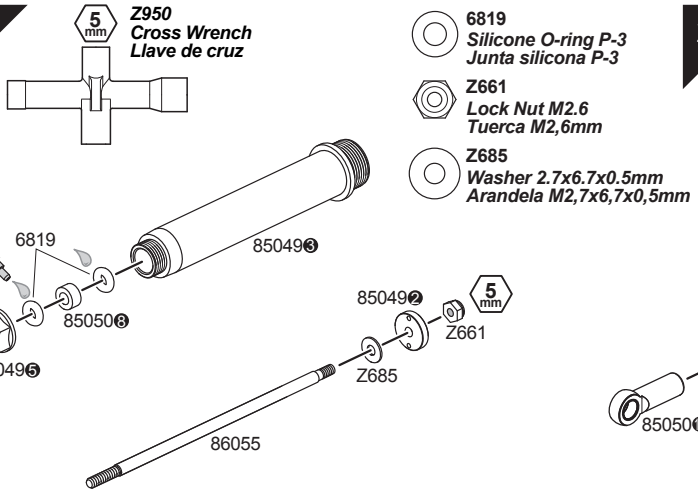


For differential installation see Section 3-11
Para montar el diferencial vea sección 3-11

3-13 Shock Maintenance / Mantenimiento amortiguadores

5-3 5-4 *Refer to Exploded View / Vea despiece*

1



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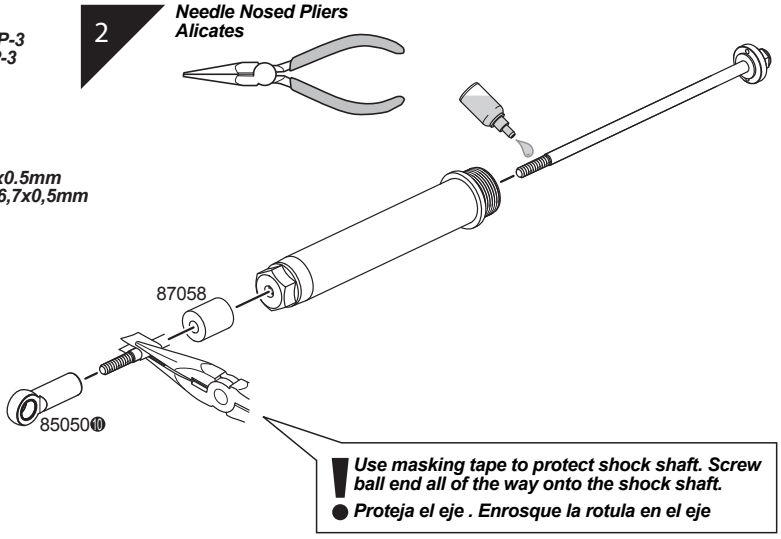
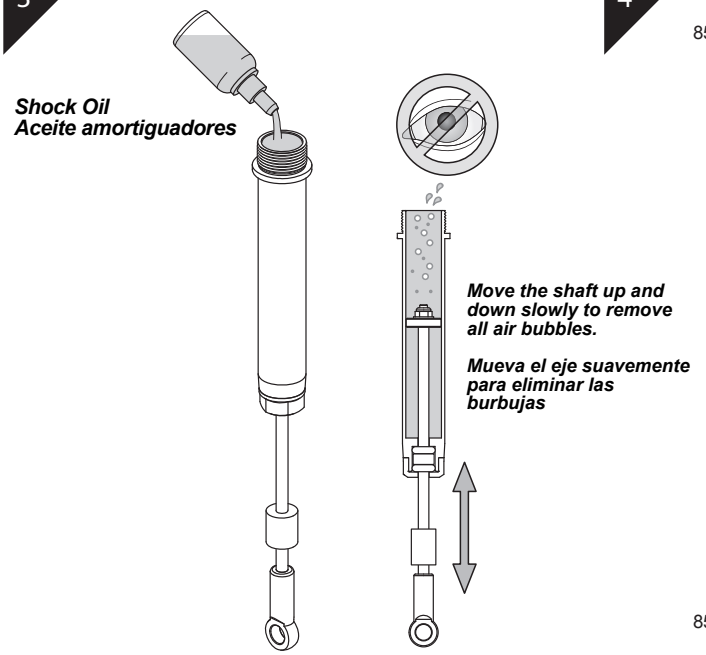


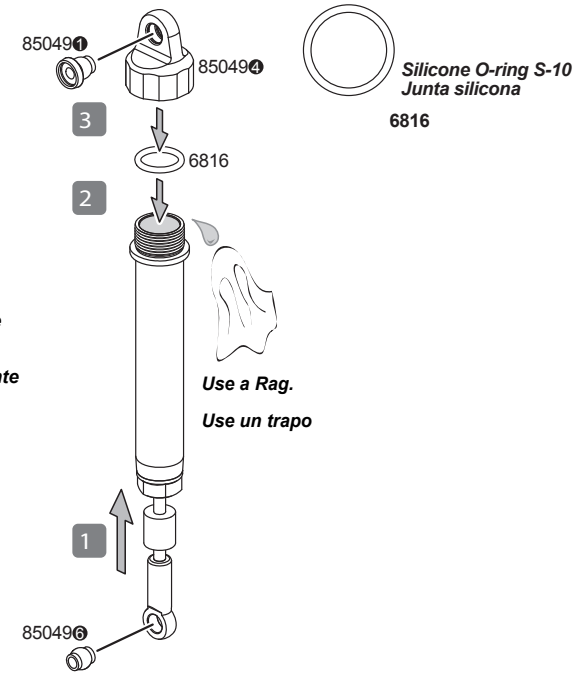
! *Use masking tape to protect shock shaft. Screw ball end all of the way onto the shock shaft.*

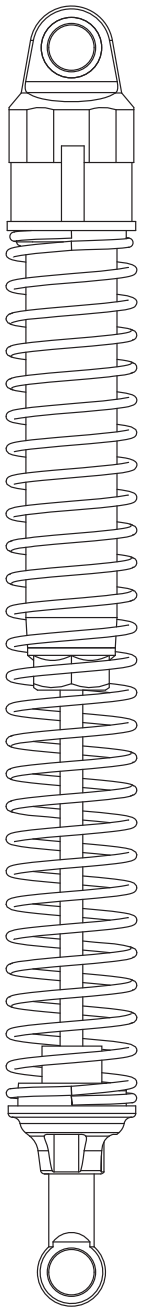
● *Proteja el eje . Enrosque la rotula en el eje*

3


Shock Oil
Aceite amortiguadores
Move the shaft up and down slowly to remove all air bubbles.
Mueva el eje suavemente para eliminar las burbujas

4





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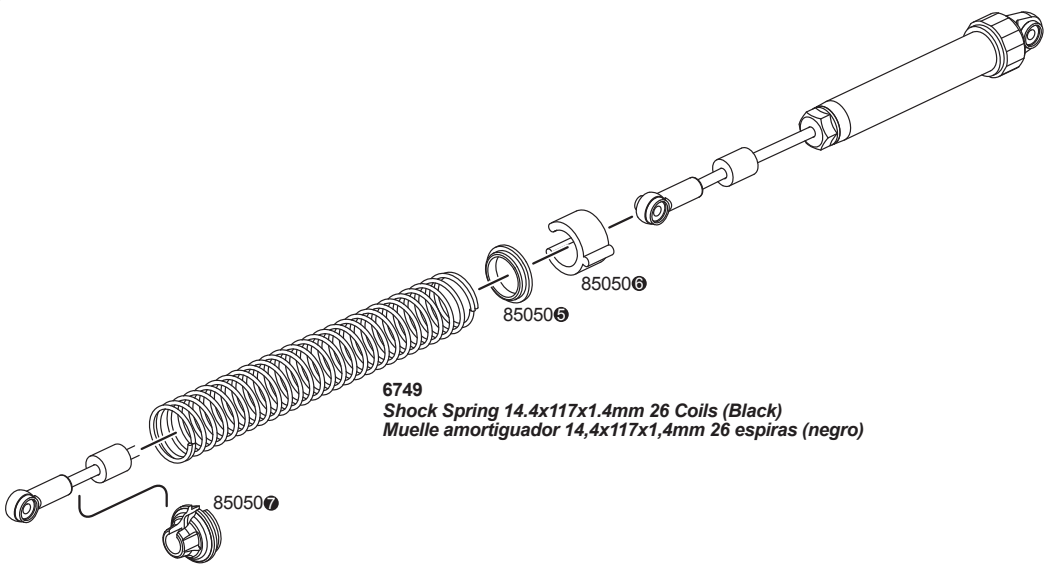
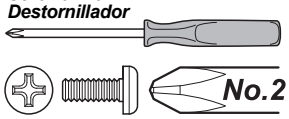
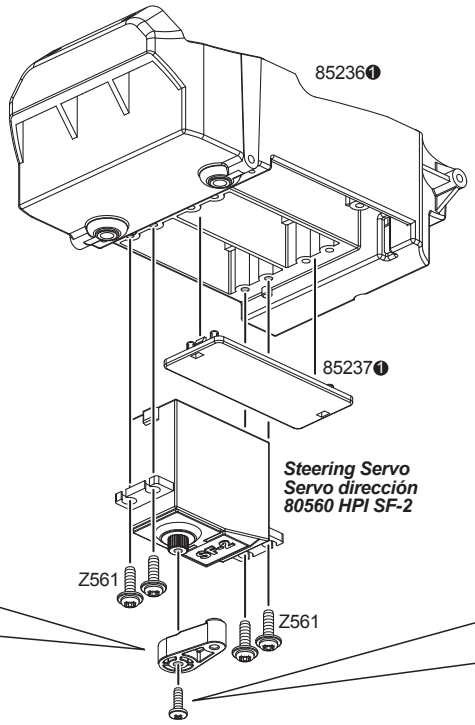


Steering Servo Servo dirección

Screwdriver
Destornillador



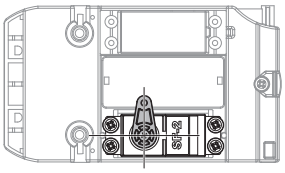


Z561
TP. Flanged Screw M3x10mm
Tornillo M3x10mm

85058㉑ ***Airtronics / JR / KO / Sanwa***
23

85058⑳ ***Hitec***
24

85058⑮ ***Futaba / HPI SF***
25



When the power is on, the servo horn should be in the neutral position as shown in the picture.

La posición del servo en neutral debe ser esta.

Hitec / Futaba / HPI SF

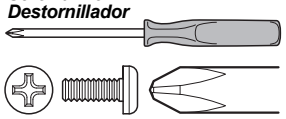
Z481
TP. Binder Head Screw M2.6x8mm
Tornillo M2,6x8mm

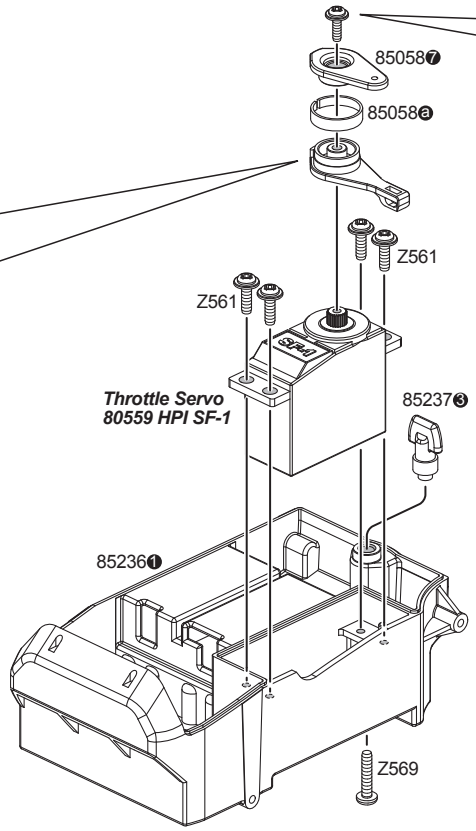
Airtronics / JR / KO / Sanwa

Z567
TP. Binder Head Screw M3x10mm
Tornillo M3x10mm

Throttle Servo Servo acelerador

Screwdriver
Destornillador

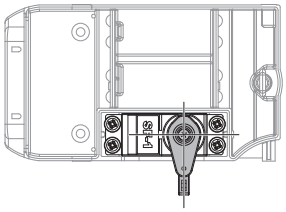




85058⑲ ***Airtronics / JR / KO / Sanwa***
23

85058⑱ ***Hitec***
24

85058⑭ ***Futaba / HPI SF***
25



When the power is on, the servo horn should be in the neutral position as shown in the picture.

La posición del servo en neutral debe ser esta.

Hitec / Futaba / HPI SF

Z488
TP. Flanged Screw M2.6x12mm
Tornillo M2,6x12mm

Airtronics / JR / KO / Sanwa

Z561
TP. Flanged Screw M3x10mm
Tornillo M3x10mm

Z561
TP. Flanged Screw M3x10mm
Tornillo M3x10mm

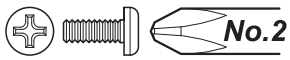
Z569
TP. Binder Head Screw M3x15mm
Tornillo M3x15mm

3-15 Throttle Linkage Assembly / Montaje varillaje acelerador

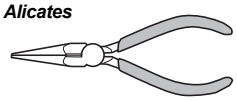
5-1 *Refer to Exploded View / Vea despiece*

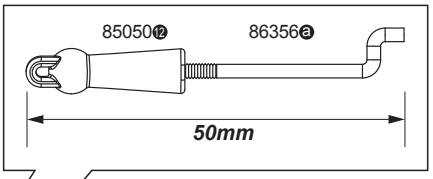
Return to section 2-6 and follow the Linkage Setup.
Vea sección 2-6 y siga los ajustes

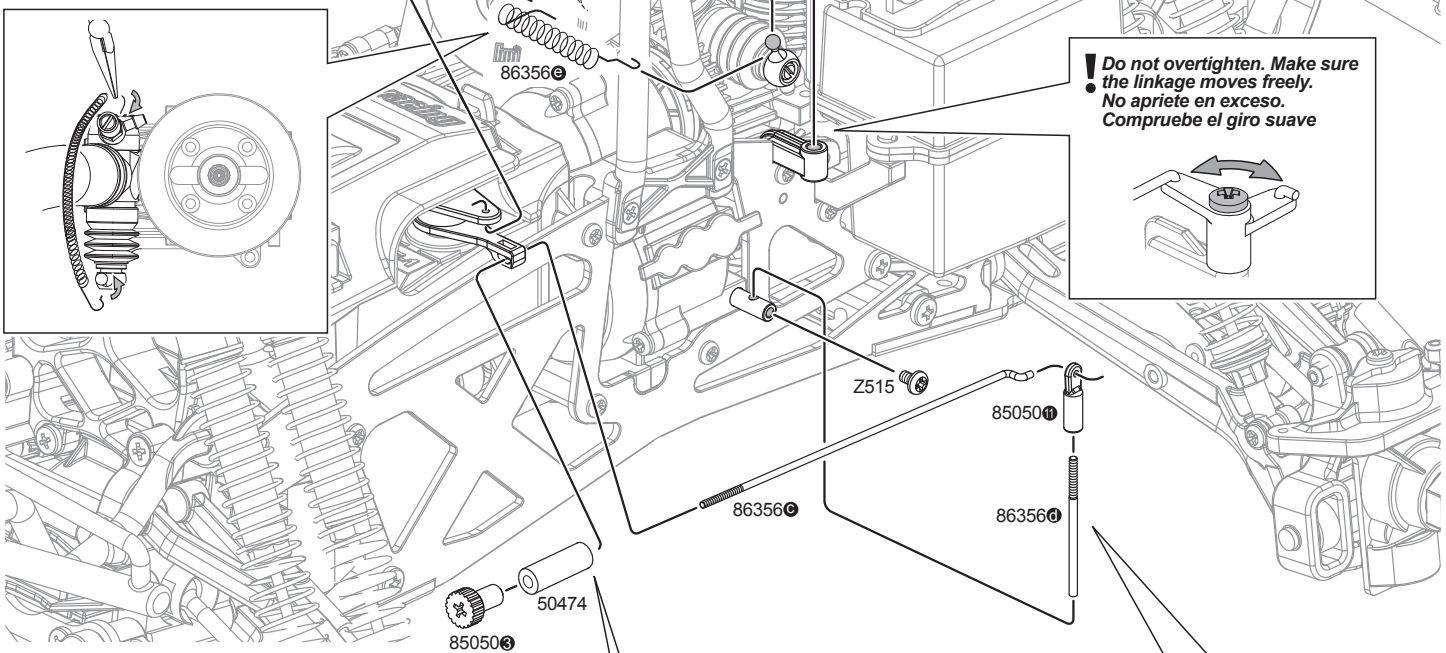
Screwdriver
Destornillador

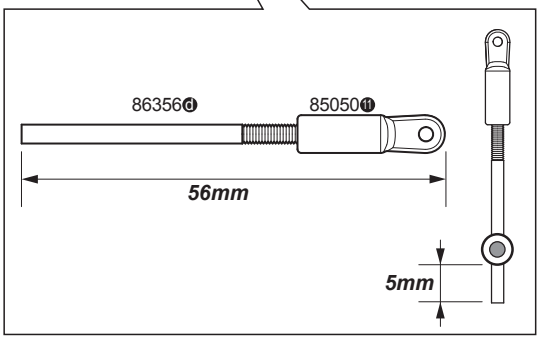


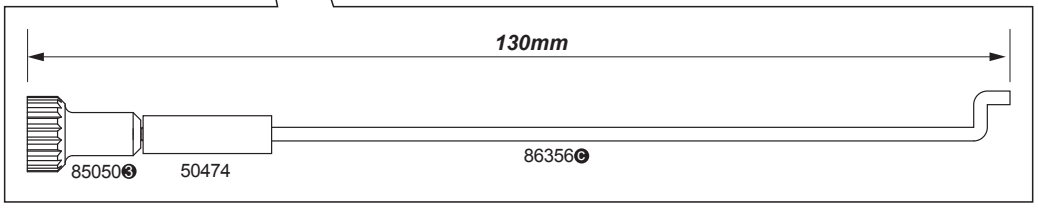
Needle Nosed Pliers
Alicates





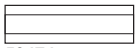






Z288
Step Screw 4x20m
Tornillo con eje 4x20mm

Z515
Binder Head Screw M3x5mm
Tornillo M3x5mm



50474
Silicone Tube 17mm
Muelle 3,8x20x0,5mm

86356ⓔ
Throttle Return Spring
Muelle retorno

NITRO STAR F4.6 ENGINE Maintenance
Mantenimiento motor Nitro Star F4,6

Engine Maintenance Mantenimiento motor

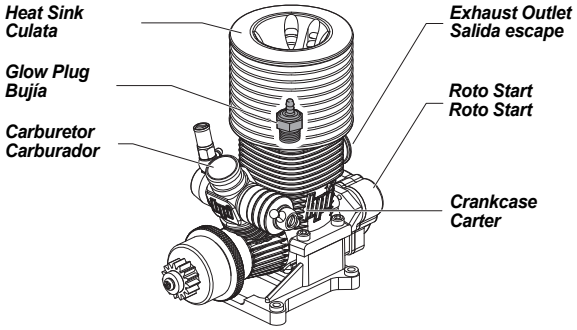
Drain all remaining fuel from the fuel tank. Use a fully charged glow igniter and try to restart the engine to burn any remaining fuel out of the lines. After burning off the fuel, remove the glow plug and add several drops of after run oil, then crank the engine over to spread it throughout the engine.

Vacíe completamente el deposito de combustible. Use un calentador de bujías bien cargado y arranque el motor con el combustible que queda en los tubos. Una vez consumido todo el combustible, retire la bujía y eche unas gotas de aceite after run, haga rodar el motor para expulsar el exceso de aceite.

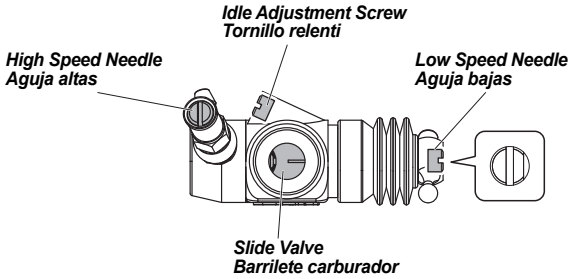
If one way bearing, Roto Start or connecting rod are damaged, please refer to diagram below.
Si el rodamiento one way ,el Roto Start o la biela están dañados , vea el diagrama siguiente

Reference Section / Ver sección			
	Break In	Rodaje	2-7
	Linkage set up	Ajuste varillaje	2-6
	Carburetor Set up	Ajuste carburador	2-8

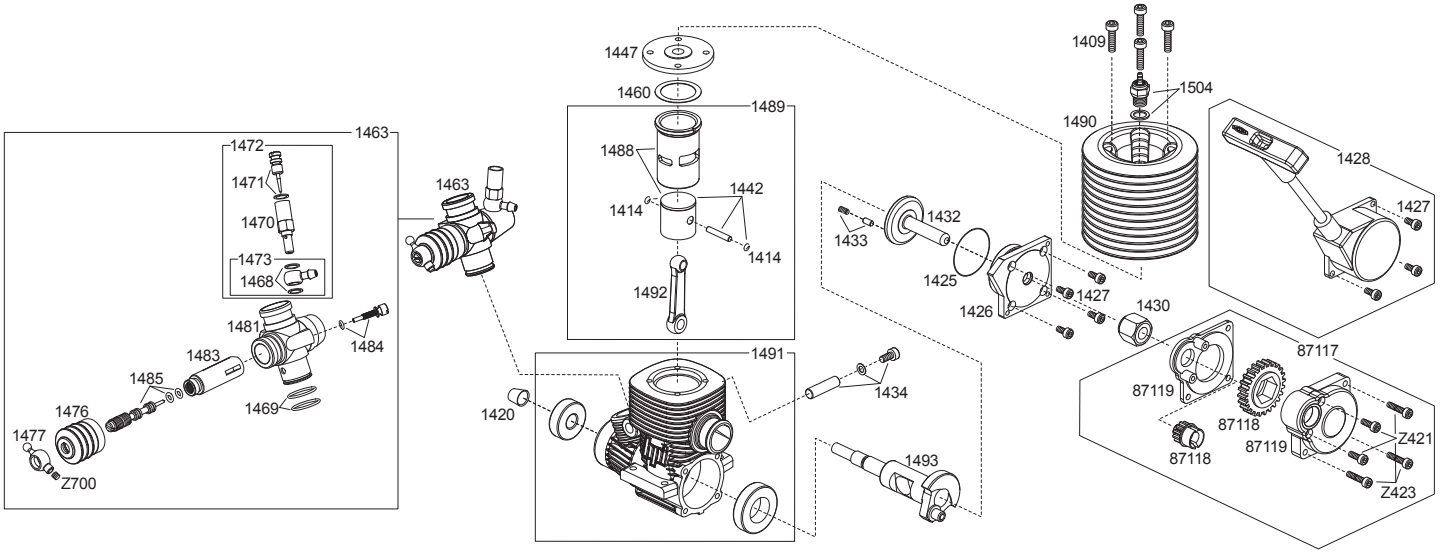
Engine Features Partes del motor



Carburetor Features Partes del carburador



Exploded view Despiece



Spare Parts List Lista de piezas

Number Ref.	Qty. Cant.	Description Descripción	Number Ref.	Qty. Cant.	Description Descripción	Number Ref.	Qty. Cant.	Description Descripción
1495	1	Nitro Star F4.6 Engine With Pullstart Motor Nitro Star F4.6 con arrancador	1450	1	Dust Protection And O-Ring Complete Set Guardapolvo y juntas toricas	1485	1	Idle Needle Valve(F4.6/D-cut) Aguja bajas (F4.6/ D)
1414	2	Retainer For Piston Pin Circlip bulon	1460	4	GASKET FOR CYLINDER (0.2mm/F4.6) Junta de cilindro (0,2mm/F4.6)	1488	1	Cylinder/Piston Set (F4.6) Cilindro y pistón (F4.6)
1409	4	CAP HEAD SCREW M3.5x16mm Tornillo cabeza cilíndrica M3.5x16mm	1463	1	Slide Carburetor Complete (Composite/F4.6/D-Cut) Carburador completo (composite/F4.6/ D)	1489	1	Cylinder/piston/Connecting Rod Set (F4.6) Cilindro,pistón y biela (F4.6)
1420	1	Brass Collet Cono arrastre embrague	1468	2	Washer Set For Fuel Line Fitting Arandelas de toma combustible	1490	1	Aluminum Heatsink Head (Purple/F4.6) Culata aluminio (Púrpura/F4.6)
1425	1	O Ring For Cover Plate (21BB) Junta tapa trasera (21BB)	1469	2	O-Ring For Carburetor Body Torica carburador	1491	1	Crankcase (Black/F4.6) Carter motor (Negro/F4.6)
1426	1	Cover Plate (F4.1) Tapa trasera (F4.1)	1470	1	Main Needle Valve Holder Soporte aguja altas	1492	1	Connecting Rod (F4.6) Biela (F4.6)
1427	8	Screw M2.6x6mm For Cover Plate Tornillo M2.6x6mm para tapa trasera	1471	1	Main Needle Aguja altas	1493	1	Crankshaft (SG Shaft/F4.6) Cigüeñal (Tipo SG/ F4.6)
1428	1	Pullstart Assy. (w/o One-Way Bearing) Arrancador completo (sin rod. One way)	1472	1	Main Needle/Fuel Intake Set Conj. Aguja altas y toma combustible	1504	1	Glow Plug Cold R5 Bujía fría R5
1430	1	One Way Bearing For Pullstart Rodamiento one way para arrancador	1473	1	Fuel Line Fitting/Washer Set Toma combustible/ juntas	87117	1	Back Plate Unit For Nitro Star BB Series And Force 21/25 Tapa trasera para motores BB y Force 21/25
1432	1	Starting Shaft (21BB) Eje arrancador (21BB)	1476	1	Dust Protection Guardapolvo	87118	1	Gear Set For Back Plate Unit Piñon tapa trasera
1433	1	Starting Pin/Pressure Spring (21BB) Pasador arranque/ muelle presión (21BB)	1477	1	Uniball Rotula uniball	87119	1	Case For Back Plate Unit Tapa caja trasera
1434	1	Lock Pin For Carburetor (21BB) Pasador fijación carburador (21BB)	1481	1	Slide Carburetor Main Body (Composite) Cuerpo carburador (composite)	Z421	12	Cap Head Screw M2.6x8mm Tornillo M2.6x8mm
1442	1	Piston Pin/Retainer Set Bulon/circlips	1483	1	Slide Valve Barrilete	Z423	12	Cap Head Screw M2.6x12mm Tornillo M2.6x12mm
1447	1	Underhead (F4.6) Culatin (F4.6)	1484	1	Idle Adjustment Screw Tornillo relenti	Z700	6	Set Screw M3x4mm Tornillo M3x4mm

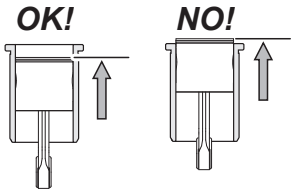
Rebuilding The Engine Reparación motor

There comes a time when your engine just won't provide the performance it did when it was new. When that time comes a rebuild is in order. Follow the steps below to disassemble, repair and then reassemble the engine.

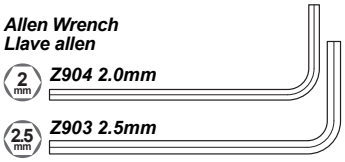
Llegara un punto en el que el motor no tendrá las mismas prestaciones que cuando era nuevo. Es el momento de repararlo. Siga las instrucciones para desmontar, reparar y después montar el motor.

Check engine compression. If there is no compression, the engine will not start.

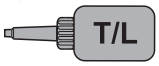
Compruebe la compresión de motor. Si no tiene compresión, el motor no arrancara.



Allen Wrench
Llave allen

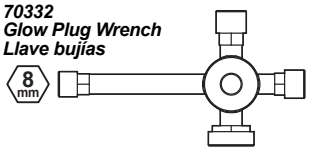


Thread Lock
Fija tornillos



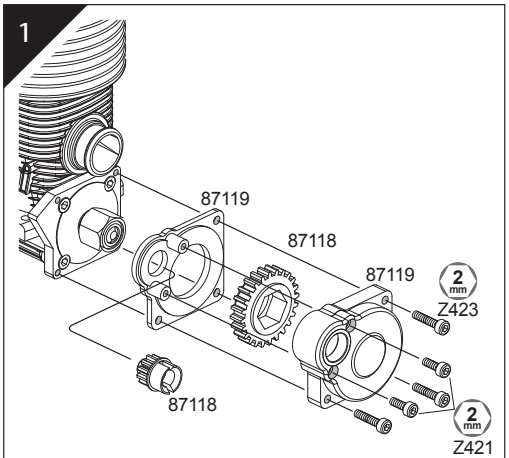
Oil Spray
Aceite en spray

70332
Glow Plug Wrench
Llave bujías



Z164
Grease
Grasa

1



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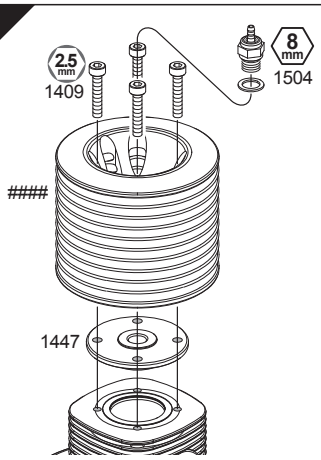

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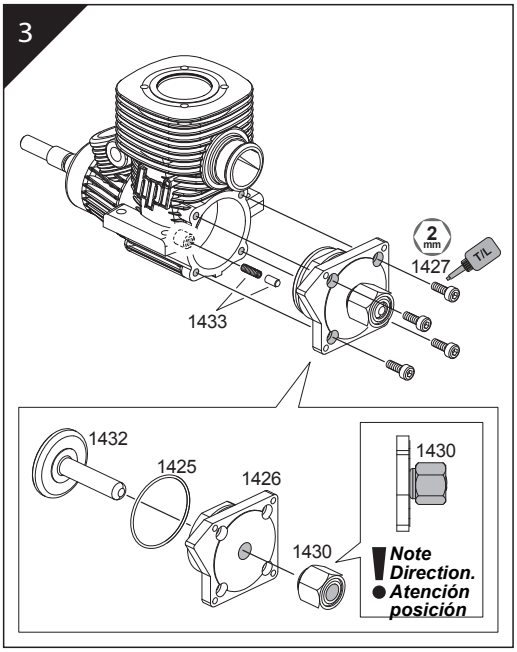

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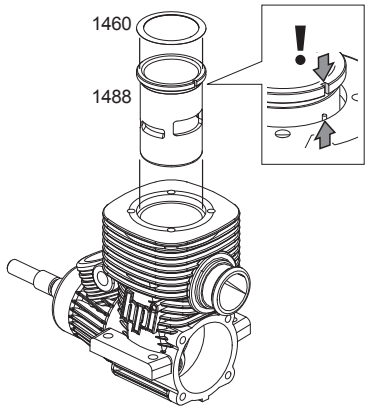

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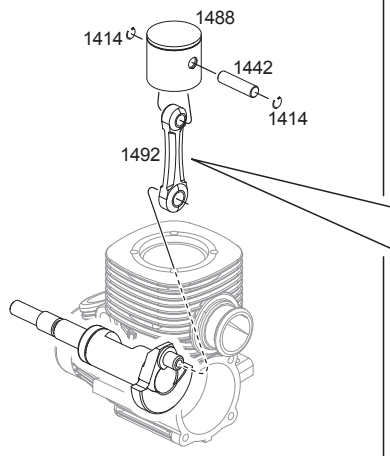
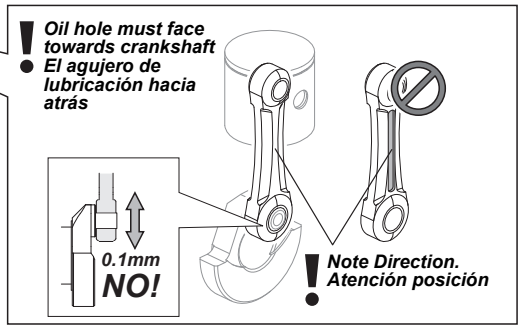
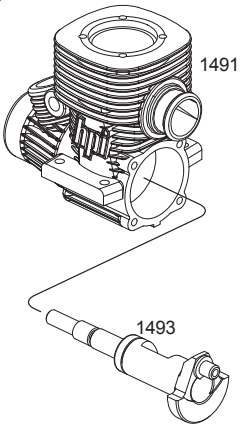




6



Engine Assembly Montaje motor

After completely disassembling the engine, examine the components to determine which parts need to be replaced. Scratches on the crankshaft, or piston and sleeve are signs that dirt has entered the engine. Before reassembly, thoroughly clean all parts to make sure they are free of foreign debris. Reassemble the engine in the reverse order of disassembly (Step 6 - Step 1). Make sure to note the direction of the oil hole on the rod and the direction of the sleeve as they are critical to proper engine function. As you assemble the engine, use a small amount of oil on each part to make sure they are well lubricated and move freely. When you are finished, the new components will need to be broken in. Please turn to 2-7 and follow the instructions to break in the new components.

Con el motor completamente desmontado, verifique los componentes y decida que piezas necesitan ser reemplazadas. Arañazos en el cigüeñal,pistón o biela indican que ha entrado polvo en el motor. Antes de montarlo, limpie cuidadosamente todas las piezas y asegúrese que no tienen virutas. Vuelva a montar en motor en orden inverso al de desmontaje (paso 6- paso 1). Asegúrese de la correcta dirección del orificio de lubricación de la biela. Use un poco de aceite al montar cada pieza del motor y asegúrese que esta bien lubricado y se mueve libremente. Una vez finalizado el montaje , su motor vuelve a necesitar rodaje. Vea el punto 2-7 y siga las instrucciones de rodaje.

After assembling the engine, follow the instructions on these pages to break in and set up your rebuilt engine. Una vez montado el motor , siga las instrucciones de estas paginas para rodar y ajustar el motor.

Reference Section	***Break In***	***Rodaje***	***2-7***
Ver sección	***Linkage set up***	***Ajuste varillaje***	***2-6***
	Carburetor Set up	***Ajuste carburador***	***2-8***

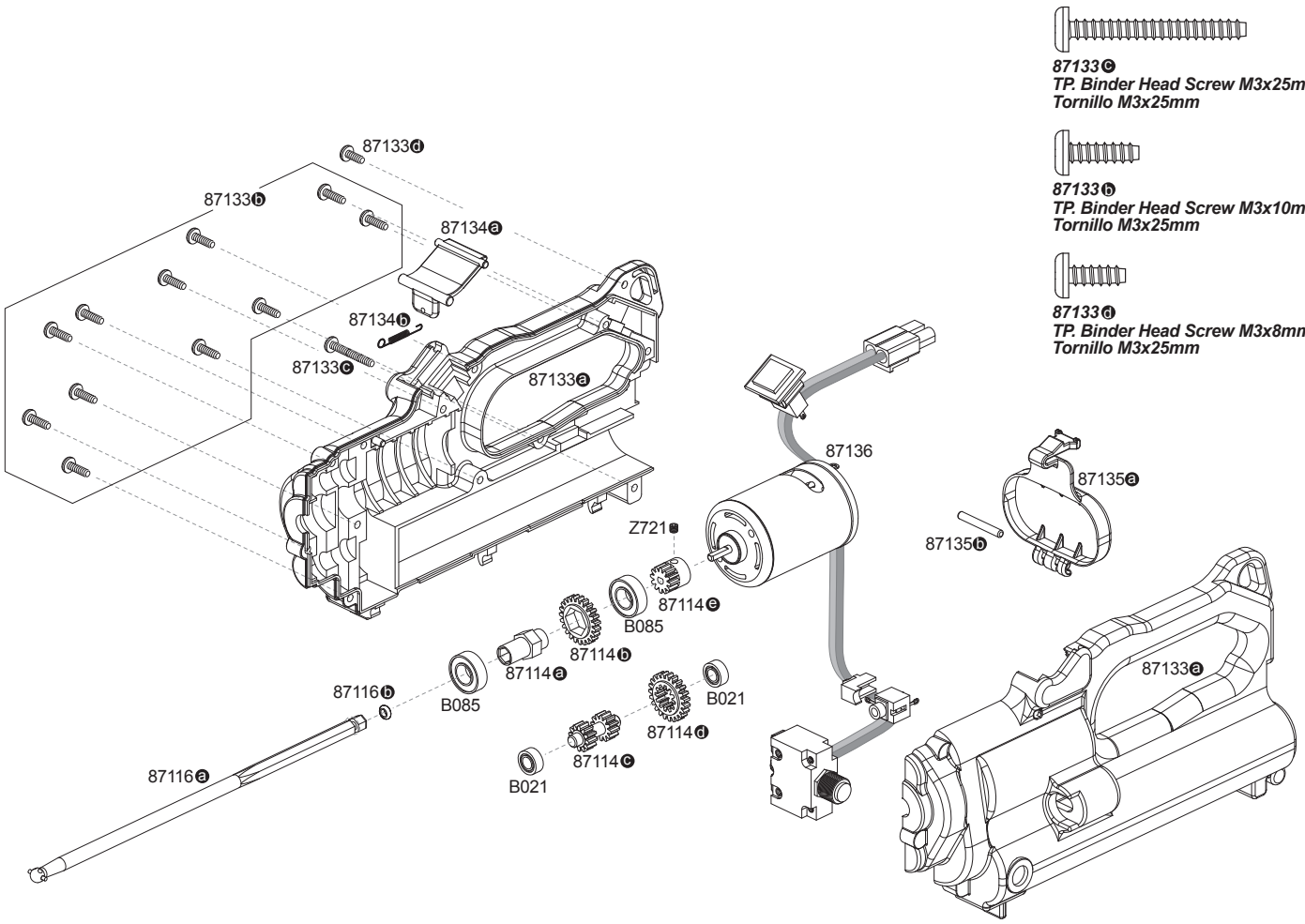
3-17 HPI Roto Start System
Roto Start HPI

Caution Cuidado

Engine and it's components may be damaged if the Roto Start is used continuously for more than 5 seconds. Your warranty will be void if the engine is damaged while using the Roto Start continuously for more than 5 seconds. If engine does not start after 5 seconds, please check that fuel is reaching the carburetor and check the glow plug. The carburetor must have fuel, however, excessive fuel will flood the engine. If the engine is flooded, remove the glow plug and operate Roto Start for 5 seconds to remove the extra fuel.

El motor y los componentes del Roto Start pueden averiarse si lo usa durante mas de 5 segundos. La garantía no cubre el motor si se ha usado durante mas de 5 segundos. Si el motor no arranca en 5 segundos, por favor compruebe si llega gasolina al carburador y verifique la bujía. El carburador debe tener gasolina, pero un exceso puede ahogarlo. Si el motor esta ahogado retire la bujía y aplique el Roto Start 5 segundos para vaciar el exceso de combustible.

Exploded view Despiece



Spare Parts List Listado de piezas

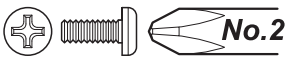
Number Ref.	Qty. Cant.	Description Descripción	Number Ref.	Qty. Cant.	Description Descripción	Number Ref.	Qty. Cant.	Description Descripción
87114	ⓐ x1 ⓓ x1 ⓑ x1 ⓔ x1 ⓒ x1	Gear Set for Motor Unit Piñoneria para motor	87134	ⓐ x1 ⓑ x1	Switch Guard Tapa interruptor	B021	2	Ball Bearing 5x10x4mm Rodamiento 5x10x4mm
87116	ⓐ x1 ⓑ x1	Starter Shaft with O-ring Eje de arranque con juntas	87135	ⓐ x1 ⓑ x1	Battery Lid for Motor Unit Tapa compartimiento baterías	B085	2	Ball Bearing 8x16x5mm Rodamiento 8x16x5mm
87133	ⓐ x1 ⓒ x1 ⓑ x11 ⓓ x1 87134 ⓐ x1 87134 ⓑ x1 87135 ⓐ x1 87135 ⓑ x1	Case for Motor Unit Carcasa motor	87136	87114 ⓔ x1 Z721 x1	Motor and Switch Set with Pinion for Motor Unit Motor e interruptor	Z721	4	Set Screw M4x4mm Tornillo M4x4mm

4-1 Engine Guard
Protector motor

Roll Bar Removal and Installation Montaje y desmontaje arco seguridad

For better engine head protection, you can install the optional engine guard.
Para una mejor protección de la culata del motor instale el protector opcional

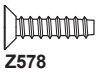
Screwdriver
Destornillador



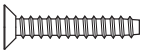
Allen Wrench
Llave allen

Z903 2.5mm

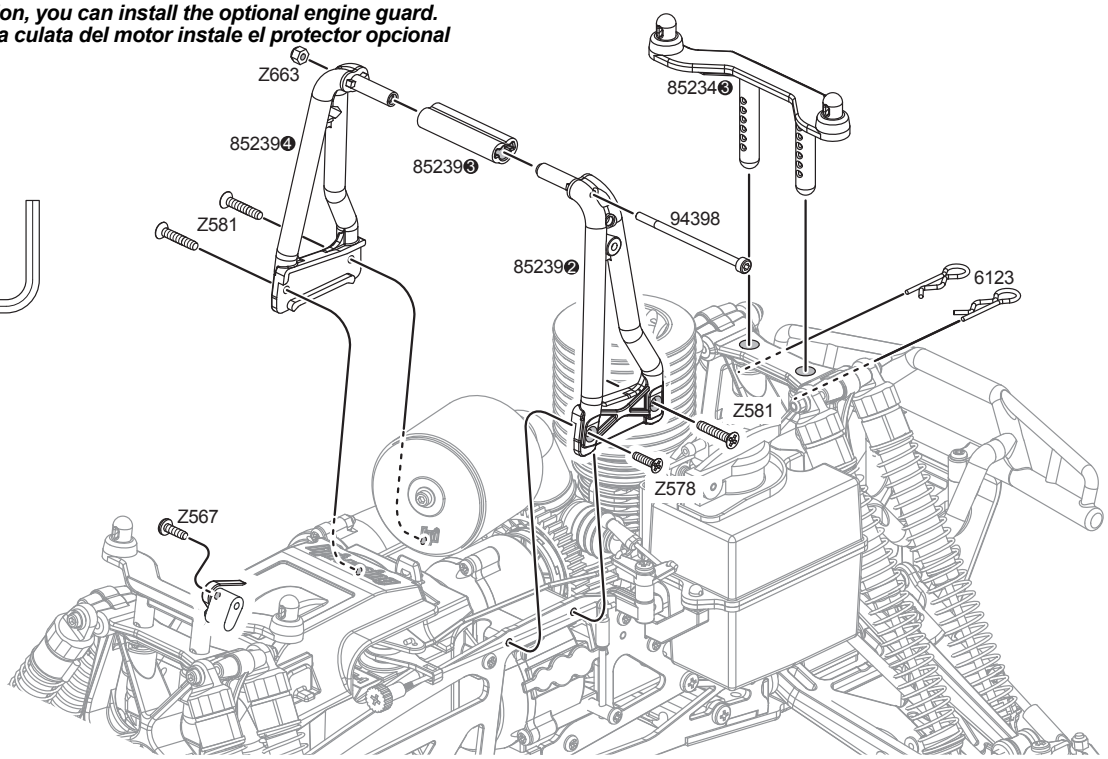
Z567
TP. Binder Head Screw M3x10mm
Tornillo M3x10mm



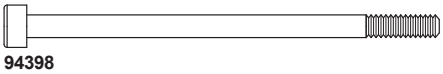
Z578
TP. Flat Head Screw M3x12mm
Tornillo avellanado M3x12mm



Z581
TP. Flat Head Screw M3x18mm
Tornillo avellanado M3x18mm



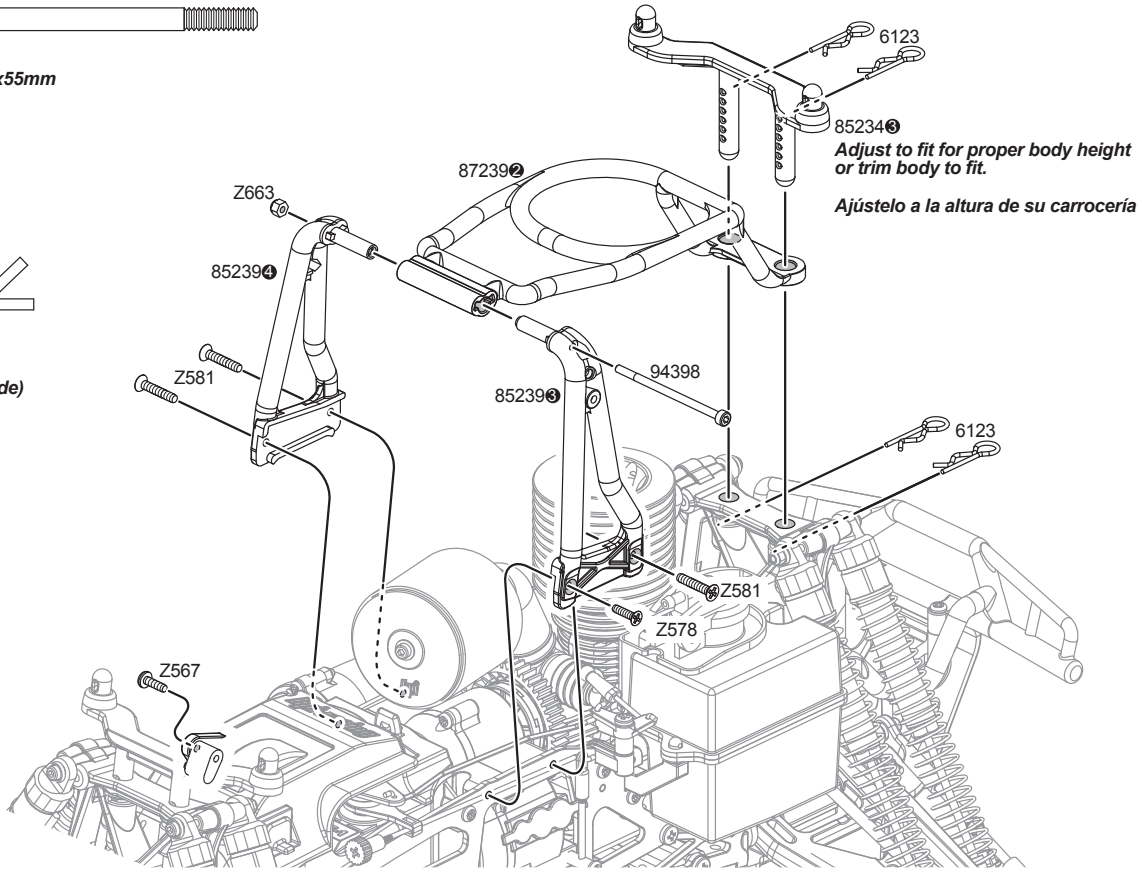
Engine Guard Removal and Installation Montaje y desmontaje protector motor



94398
Cap Head Screw M3x55mm
Tornillo M3x55mm

Z663
Lock Nut M3
Tuerca M3

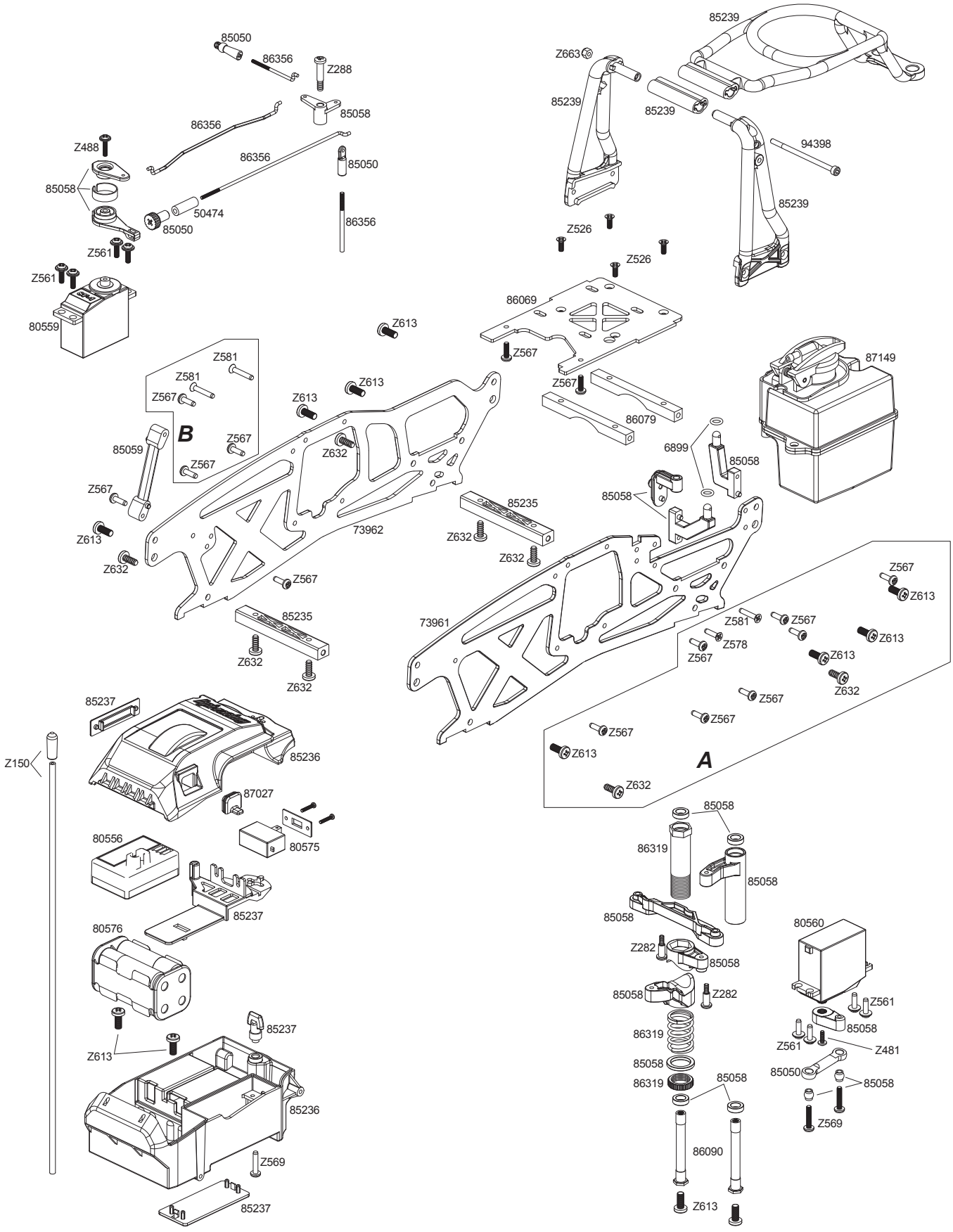
6123
Body Pin (Large)
Clip carrocería (grande)



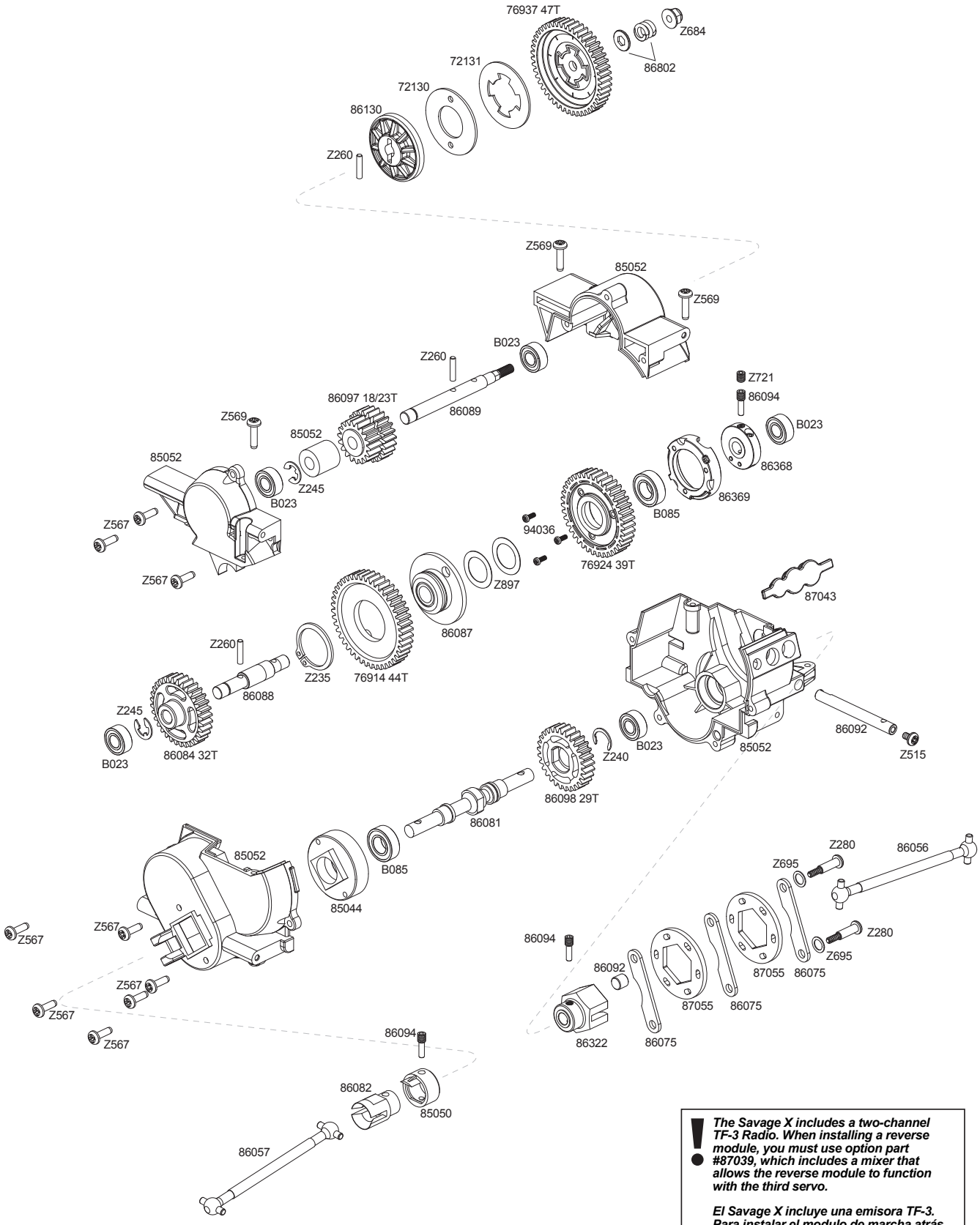
Adjust to fit for proper body height or trim body to fit.

Ajústelo a la altura de su carrocería

5-1 Chassis Assembly
Despiece chasis



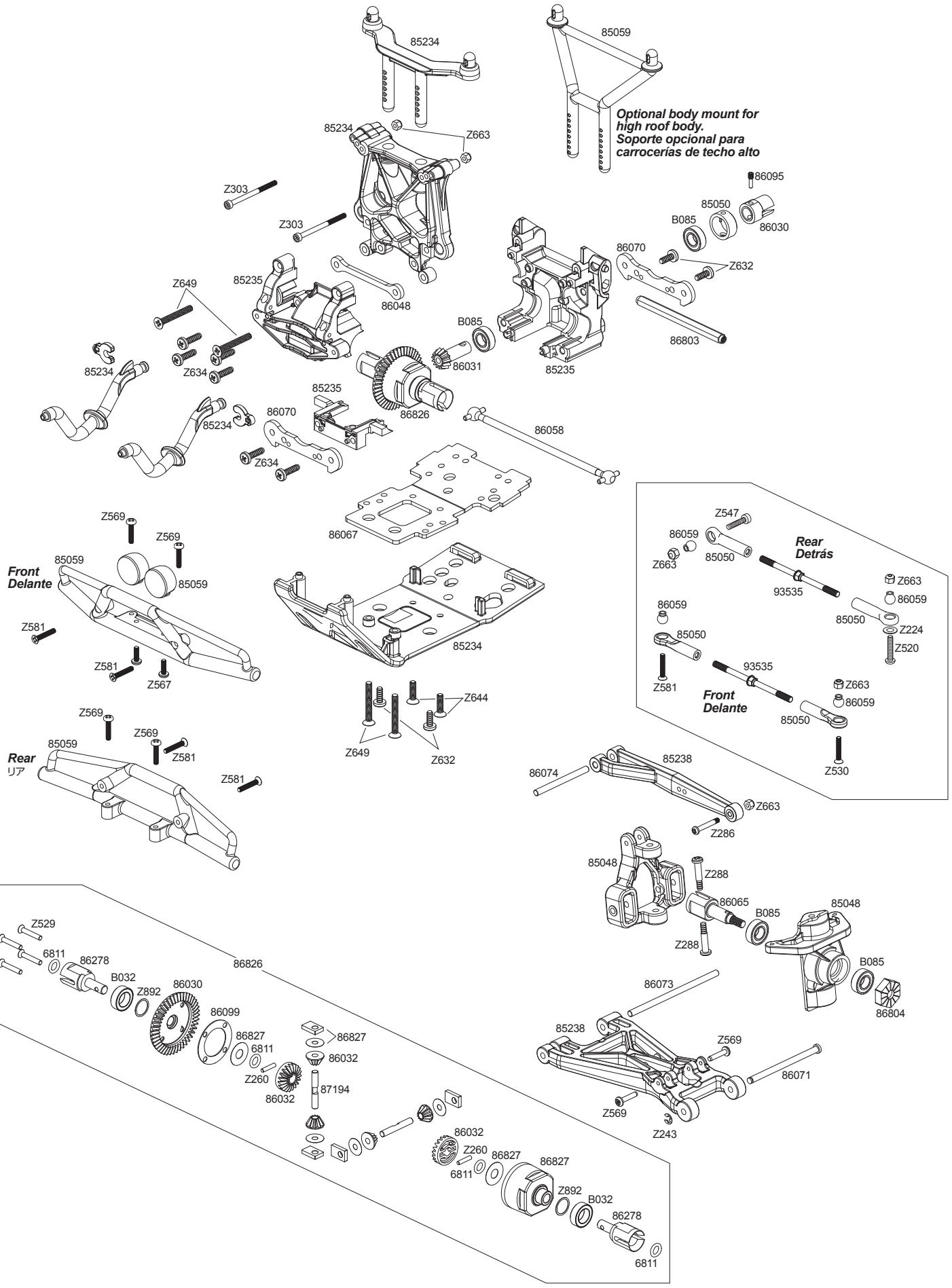
Transmission Assembly
Montaje transmisión



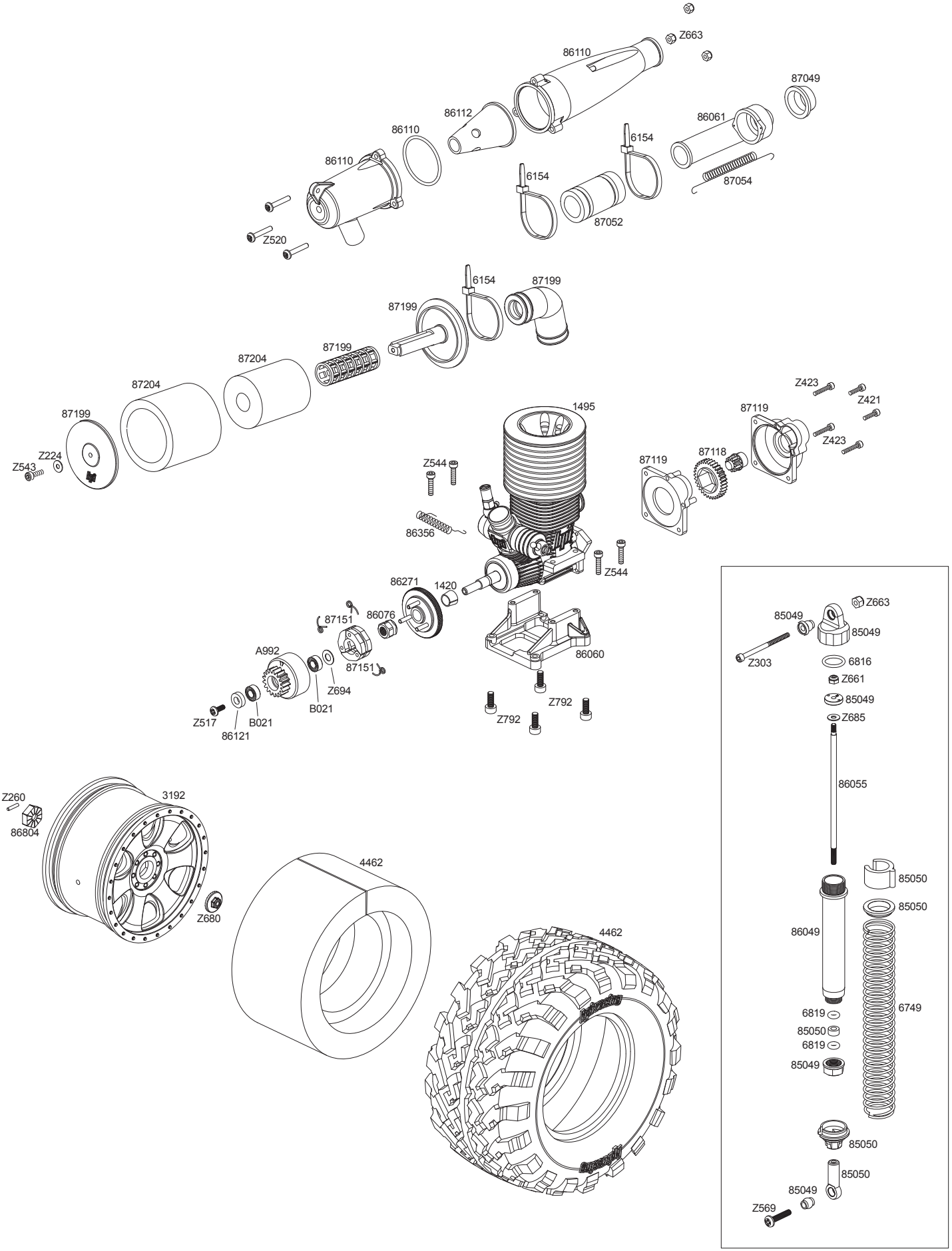
The Savage X includes a two-channel TF-3 Radio. When installing a reverse module, you must use option part #87039, which includes a mixer that allows the reverse module to function with the third servo.

El Savage X incluye una emisora TF-3. Para instalar el modulo de marcha atrás debe usar la pieza opcional 87039 que incluye un mezclador para su funcionamiento con el tercer servo.

5-3 Gear Box Assembly
Montaje caja transmisión

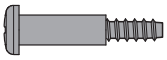


5-4 Engine Assembly / Montaje motor

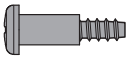


6-1 Parts Reference Referencias

94036 x3
Button Head Screw M2x5mm
Tornillo cabeza botón M2x5mm



Z280 x2
Step Screw M3x19mm
Tornillo con vástago M3x19mm



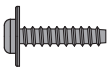
Z282 x2
Step Screw M3x14mm
Tornillo con vástago M3x14mm

Z288 x9
Step Screw M4x20mm
Tornillo con vástago M4x20mm

Z431 x2
Binder Head Screw M2.6x8mm
Tornillo cabeza redonda M2,6x8mm

Z432 x2
Binder Head Screw M2.6x10mm
Tornillo cabeza redonda M2,6x10mm

Z481 x2
TP. Binder Head Screw M2.6x8mm
Tornillo autorros. cabeza redonda M2,6x8mm



Z488 x2
TP. Flanged Screw M2.6x12mm
Tornillo con arandela M2,6x12mm

Z515 x2
Binder Head Screw M3x5mm
Tornillo cabeza redonda M3x5mm

Z516 x2
Binder Head Screw M3x10mm
Tornillo cabeza redonda M3x10mm

Z303 x4
Cap Head Screw M3x42mm
Tornillo con vástago M3x42mm

94398 x1
Cap Head Screw M3x55mm
Tornillo con vástago M3x55mm

Z517 x5
Binder Head Screw M3x8mm
Tornillo cabeza redonda M3x8mm

Z520 x5
Binder Head Screw M3x18mm
\Tornillo cabeza redonda M3x18mm

Z526 x5
Flat Head Screw M3x8mm
Tornillo avellanado M3x8mm

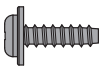
Z529 x8
Flat Head Screw M3x15mm
Tornillo avellanado M3x15mm

Z530 x3
Flat Head Screw M3x18mm
Tornillo avellanado M3x18mm

Z543 x1
Cap Head Screw M3x10mm
Tornillo cabeza cilíndrica M3x10mm

Z544 x4
Cap Head Screw M3x12mm
Tornillo cabeza cilíndrica M3x12mm

Z547 x4
Cap Head Screw M3x20mm
Tornillo cabeza cilíndrica M3x20mm



Z561 x11
TP. Flanged Screw M3x10mm
Tornillo con arandela M3x10mm

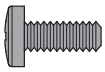
Z567 x26
TP. Binder Head Screw M3x10mm
Tornillo autorros. cabeza redonda M3x10mm

Z569 x22
TP. Binder Head Screw M3x15mm
Tornillo autorros. cabeza redonda M3x15mm

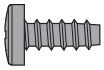
Z570 x2
TP. Binder Head Screw M3x18mm
Tornillo autorros. cabeza redonda M3x18mm

Z578 x3
TP. Flat Head Screw M3x12mm
Tornillo autorros. avellanado M3x12mm

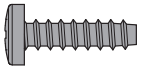
Z581 x10
TP. Flat Head Screw M3x18mm
Tornillo autorros. avellanado M3x18mm



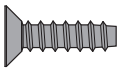
Z613 x13
Binder Head Screw M4x10mm
Tornillo cabeza redonda M4x10mm



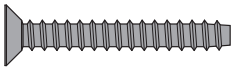
Z632 x17
TP. Binder Head Screw M4x10mm
Tornillo autorros. cabeza redonda M4x10mm



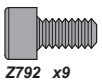
Z634 x13
TP. Binder Head Screw M4x15mm
Tornillo autorros. cabeza redonda M4x15mm



Z644 x5
TP. Flat Head Screw M4x15mm
Tornillo autorros. avellanado M4x15mm



Z649 x9
TP. Flat Head Screw M4x30mm
Tornillo autorros. avellanado M4x30mm

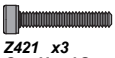


Z792 x9
Cap Head Screw M4x8mm
Tornillo cabeza cilíndrica M4x8mm

Z721 x2
Set Screw M4x4mm
Allen M4x4mm

Z725 x1
Set Screw M4x10mm
Allen M4x10mm

Z421 x2
Cap Head Screw M2.6x8mm
Tornillo cabeza cilíndrica M2,6x8mm

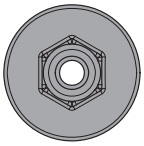


Z421 x3
Cap Head Screw M2.6x12mm
Tornillo cabeza cilíndrica M2,6x12mm

Z741 x1
Set Screw M5x5mm
Allen M5x5mm

Z661 x9
Lock Nut M2.6
Tuerca M2,6

Z663 x19
Lock Nut M3
Tuerca M3



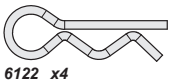
Z680 x5
Flanged Lock Nut M5x8mm
Tuerca autoblocante M5x8mm

Z682 x4
Flanged Lock Nut M5
Tuerca autoblocante M5

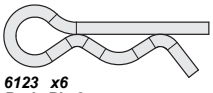
Z684 x1
Flanged Lock Nut M4
Tuerca autoblocante M4

86094 x4
Screw Shaft M4x2x12mm
Eje roscado M4x2x12mm

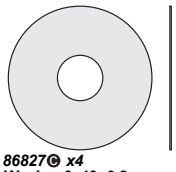
86095 x2
Screw Shaft M5x3x18mm
Eje roscado M5x3x18mm



6122 x4
Body Pin 6mm
Clip carrocería 6mm



6123 x6
Body Pin 8mm
Clip carrocería 8mm



86827ⓒ x4
Washer 6x19x0.2mm
Arandela 6x19x0,2mm

86827ⓓ x8
Washer 4x10x0.15mm
Arandela 4x10x0,15m

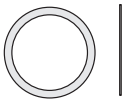
Z203 x2
Washer 3x6x0.5mm
Arandela 3x6x0,5mm

Z224 x6
Washer 3x8x0.5mm
Arandela 3x8x0,5mm

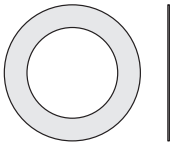
Z685 x10
Washer 3x8x0.5mm
Arandela 3x8x0,5mm

Z694 x3
Washer 5x10x0.5mm
Arandela 5x10x0,5mm

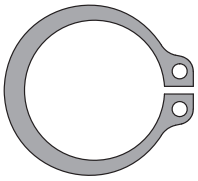
Z695 x4
Washer 4x6x0.3mm
Arandela 4x6x0,3mm



Z892 x8
Washer 5x7x0.2mm
Arandela 5x7x0,2mm



Z897 x8
Washer 12x18x0.2mm
Arandela 12x18x0,2mm



Z235 x1
C Clip 20mm

Z240 x1
C Clip 8mm

Z243 x6
E Clip E3mm

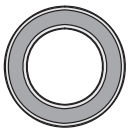
Z245 x2
E Clip E5mm

Z260 x6
Pin 2.5x12mm
Pasador 2,5x12mm

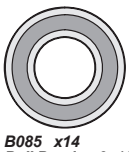
B072 x1
Metal Bushing 5x11x4mm
Casquillo bronce 5x11x4mm

B021 x2
Ball Bearing 5x10x4mm
Rodamiento 5x10x4mm

B023 x5
Ball Bearing 5x10x4mm
Rodamiento 5x10x4mm



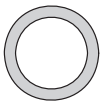
B032 x4
Ball Bearing 10x16x5mm
Rodamiento 10x16x5mm



B085 x14
Ball Bearing 8x16x5mm
Rodamiento 8x16x5mm

87194 x4
Shaft For 4 Bevel Gear Diff 4x27mm
Eje para diferencial 4 satélites

6811 x8
O-Ring 6x9.5x2mm
Torica 6x9,5x2mm



6816 x8
Silicone O-Ring S10
Torica silicona S10

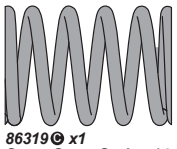
6819 x16
Silicone O-Ring P3
Torica silicona P3

6899 x2
O-Ring 5x8x1.5mm
Torica 5x8x1,5mm

86076 x1
Pilot Nut 1/4-28x8.5mm
Tuerca embrague 1/4-28x8,5mm

86077 x1
Collet 7x6.5mm
Cono embrague 7x6,5m

86319ⓔ x1
Steering Post 12x47mm
Soporte dirección 12x47mm



86319ⓒ x1
Servo Saver Spring 14x5x0.7mm
Muelle salva-servo 14x5x0,7mm

86319 x1 ⓕ
Servo Saver Nut
Tuerca salva-servo

86356ⓔ x1
Throttle Return Spring
Muelle retorno acelerador

72360 x1
Spring 3.8x20x0.5mm
Muelle 3,8x20x0,5mm

87054 x1
Exhaust Manifold Spring 3.2x75x0.7mm x56
Muelle escape 3,2x75x56

86145 x2
Flange Pipe 3x6x10mm
Tubo labiado 3x6x10mm

86171 x1
Metal Bushing 5x7.5x3mm
Casquillo bronce 5x7,5x3mm

87042ⓐ x1
Spring 4.9x8x7mm
Muelle 4,9x8x7mm

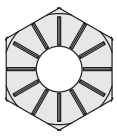
87042ⓑ x1
Washer 4.3x10x1.0mm
Arandela 4,3x10x1,0mm

86059 x8
Ball 6.8x7.3x3mm
Rotula 6,8x7,3x3mm

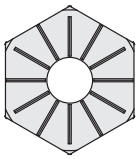
86144 x4
Ball 6.8x8x3mm
Rotula 6,8x8x3mm

87151ⓐ x3
Teflon Clutch Shoe
Zapata teflon embrague

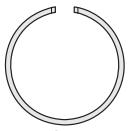
87151ⓑ x6
Clutch Spring
Muelle embrague



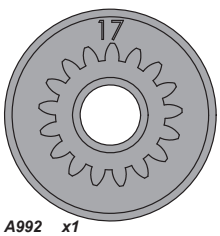
86066 x4
Hex Wheel Hub 14mm
Hexágono rueda 14mm



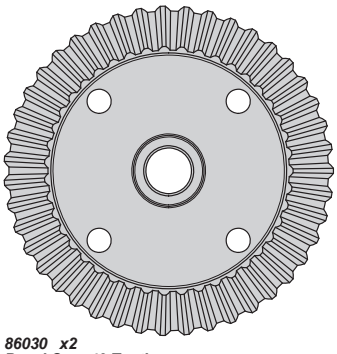
86804 x4
Hex Wheel Hub 17mm
Hexágono rueda 17mm



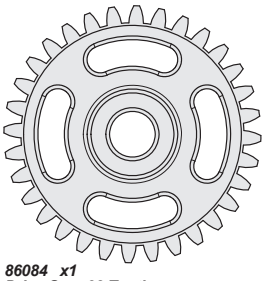
85058ⓐ x1
Servo Saver Spring 14x5x0.7
Muelle salva-servo 14x5x0,7



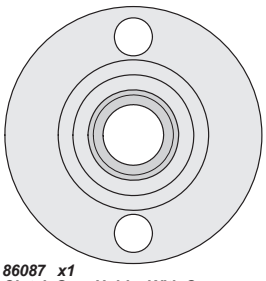
A992 x1
Heavy-duty Clutch Bell 17 Tooth
Campana embrague ref. 17 dientes



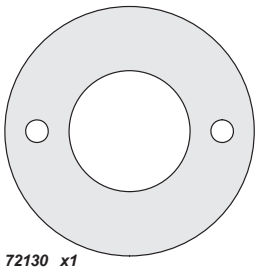
86030 x2
Bevel Gear 43 Tooth
Corona diferencial



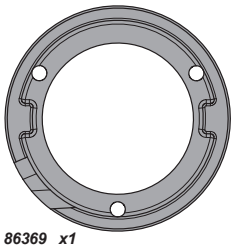
86084 x1
Drive Gear 32 Tooth
Corona transmisión 32 dientes



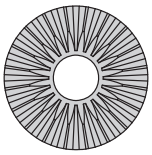
86087 x1
Clutch Gear Holder With One-way
Soporte embrague con One way



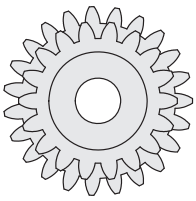
72130 x1
Stainless Steel Slipper Plate
Placa acero slipper



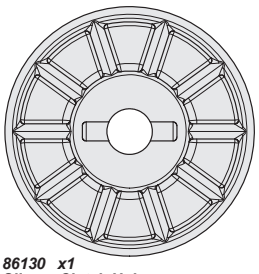
86369 x1
Clutch Hub
Soporte embrague



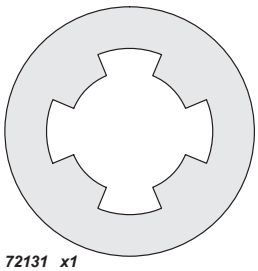
86032ⓐ x4
Bevel Gear 20 Tooth
Piñon 20 d.



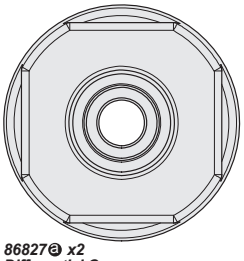
86097 x1
Drive Gear 18-23 Tooth
Piñon transmisión 18-23d.



86130 x1
Slipper Clutch Hub
Soporte slipper

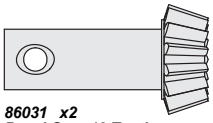


72131 x1
Slipper Clutch Pad
Zapata slipper

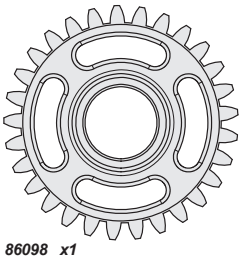


86827ⓐ x2
Differential Case
Cuerpo diferencial

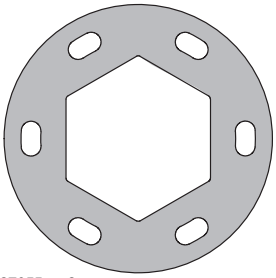
86032ⓑ x8
Bevel Gear 10 Tooth
Piñon 10d.



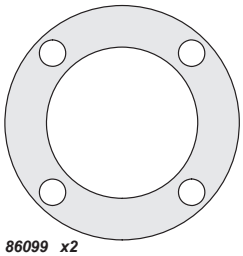
86031 x2
Bevel Gear 13 Tooth
Piñon cónico 13d.



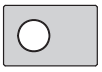
86098 x1
Idler Gear 29 Tooth
Piñon intermedio 29d.



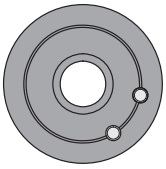
87055 x2
Brake Disk
Disco freno



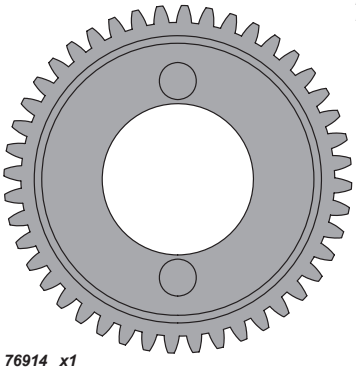
86099 x2
Diff Case Washer 0.7mm
Junta diferencia 0,7mm



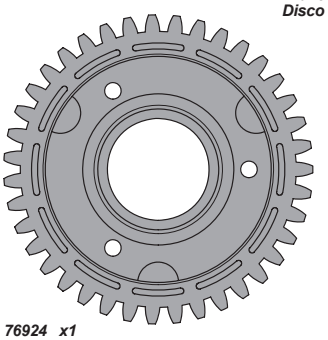
86827ⓑ x8
Differential Plate 8x13x2.5mm
デフプレート



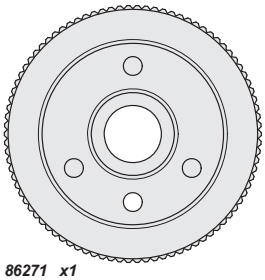
86368 x1
Clutch Holder
Soporte embrague



76914 x1
Transmission Gear 44 Tooth
Corona transmisión 44d.



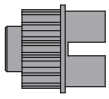
76924 x1
Transmission Gear 39 Tooth
Corona transmisión 39d.



86271 x1
Flywheel 34mm
Volante embrague 34mm

86101ⓔ x1
Linkage Rod
Varillaje

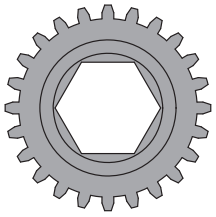
86101ⓕ x1
Linkage Rod
Varillaje



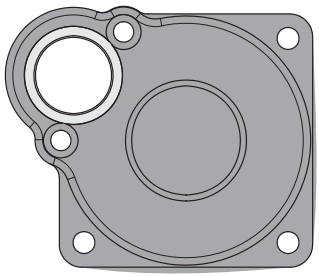
87118ⓑ x1
Gear 11 Tooth
Piñon 11d.

86101ⓓ x1
Linkage Rod
Varillaje

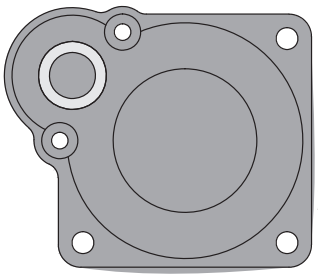
86101ⓒ x1
Linkage Rod
Varillaje



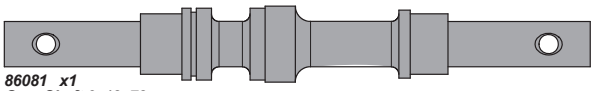
87118ⓐ x1
Gear 32 Tooth
Corona 32d.



87118ⓐ x1
Back Plate Case
Placa trasera



87118ⓗ x1
Back Plate Case
Tapa trasera

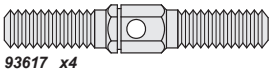


86081 x1
Gear Shaft 6x12x78mm
Eje transmisión 6x12x78mm

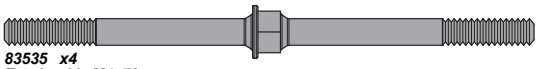
86088 x1
Idler Shaft 6x8x45mm
Eje intermedio 6x8x45mm

86089 x1
Drive Shaft 6x71mm
Eje transmisión 6x71mm

86090 x2
Steering Crank Post 6x49mm
Soporte dirección 6x49mm



93617 x4
Turnbuckle M5x35mm
Tirante suspensión M5x35mm



83535 x4
Turnbuckle M4x70mm
Tirante suspensión M4x70mm

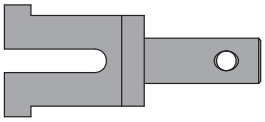
86075 x3
Brake Plate
Placa freno

86055 x8
Shock Shaft 3x86mm
Eje amortiguador 3x86mm

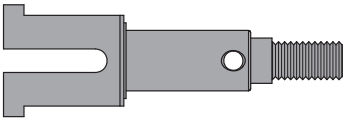
86056 x1
Dogbone 8x84mm
Cardan 8x84mm

86057 x1
Dogbone 8x78mm
Cardan 8x78mm

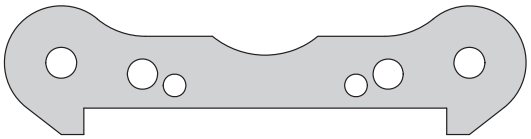
86058 x4
Dogbone 9x123mm
Cardan 9x123mm



86064 x4
Diff Shaft 14x34mm
Vaso diferencial 14x34mm



86065 x4
Axle 8x9x44mm
Vaso con eje 8x9x44mm



86070 x4
Lower Arm Brace 4x54x3mm
Soporte trapecios inf. 4x54x3mm

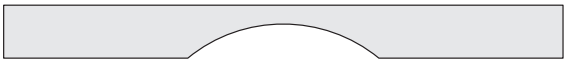
86048 x2
Upper Arm Brace 4x54x3mm
Soporte trapecios sup. 4x54x3mm

86071 x4
Flange Shaft 4x62mm
Eje labiado 4x62mm

86073 x4
Shaft 4x78mm
Eje 4x78mm

86074 x4
Shaft 4x46mm
Eje 4x46mm

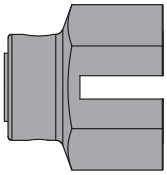
86803 x2
Joint Post 4x6x74mm
Soporte 4x6x74mm



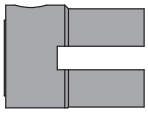
86079 x2
Engine Mount Brace 7x7x74mm
Soporte motor 7x7x74mm

86092ⓐ x1
Brake Cam
Leva freno

86092ⓑ x1
Brake Piston
Pistón freno



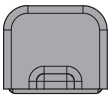
86082 x1
CUP JOINT 6x13x20mm
Vaso transmisión 6x13x20mm



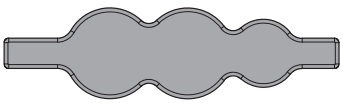
86083 x2
CUP JOINT 8x19mm
Vaso transmisión 8x19mm

86322 x1
CUP JOINT 6x19x21mm
Vaso transmisión 6x19x21mm

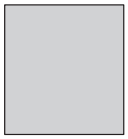
87058 x8
Rubber Tube 3x8x10mm
Tubo goma 3x8x10mm



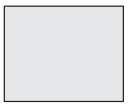
87027 x1
Rubber Cap 10x11mm
Tapa goma 10x11mm



87043 x1
Rubber Cap For Gear Box
Tapa goma transmisión



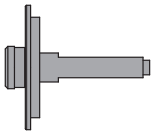
87204ⓐ x2
Outer Filter Element
Filtro aire externo



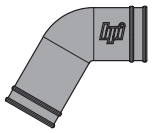
87204Ⓑ x2
Inner FIlter Element
Filtro aire interno

87199ⓔ x1
Air Filter End Cap
Tapa filtro aire

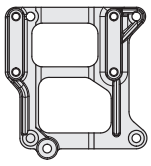
87203ⓓ x1
Air Filter Inner Mesh Sleeve
Soporte interior filtro aire



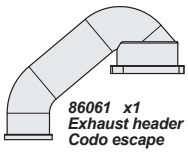
87203ⓒ x1
Air Filter Body
Cuerpo filtro aire



87203ⓕ x1
Air Filter Elbow
Codo filtro aire

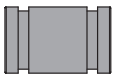


86060 x1
Engine mount
Bancada motor

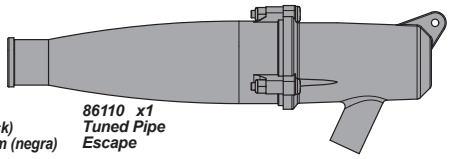


86061 x1
Exhaust header
Codo escape

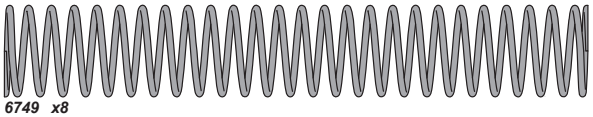
87049 x1
Shaped Exhaust Gasket
Junta escape



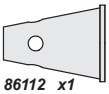
87052 x1
Silicone Exhaust Coupling 12x18x30mm (Black)
Junta silicona unión tubo escape 12x18x30mm (negra)



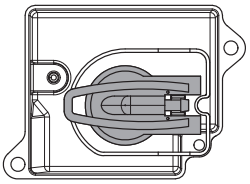
86110 x1
Tuned Pipe
Escape



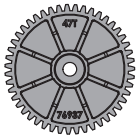
6749 x8
Shock Spring 14.4x117x1.4mm 26 Coils (Black)
Muelle amort. 14,4x117x1,4mm 26 espiras (negro)



86112 x1
Aluminum Inner Cone
Cono interno escape

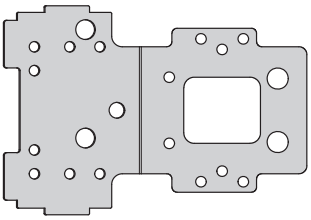


87149 x1
Racing Fuel Tank 160cc
Deposito combustible 160cc

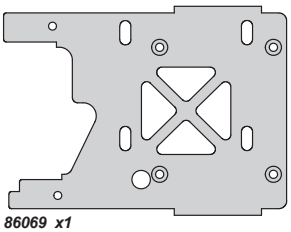


76937 x1
Spur Gear 47T
Corona 47d

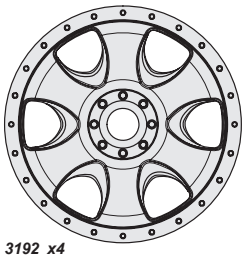
6154 x4
Nylon Strap
Brida nylon



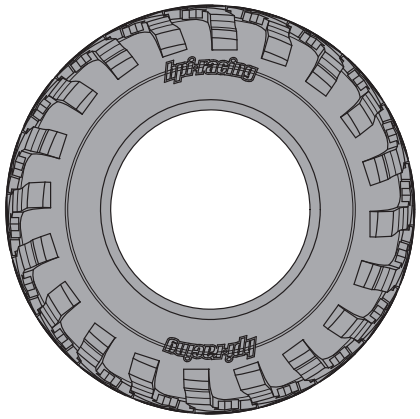
86067 x2
Bulkhead Lower Plate 2.5mm
Placa inferior caja trans. 2,5mm



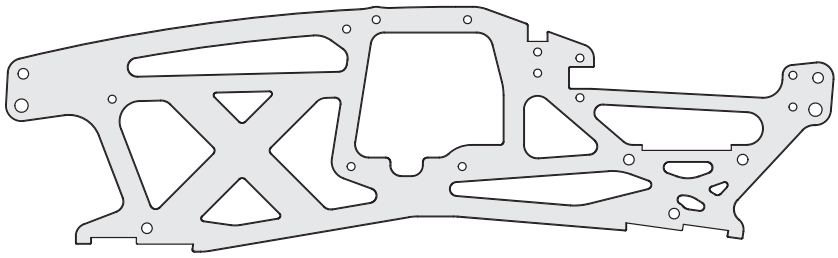
86069 x1
Engine Plate 3mm
Soporte motor 3mm



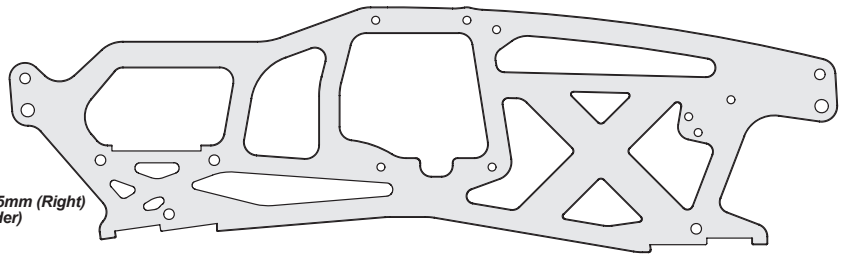
3192 x4
Warlock Wheel Chrome (83x56mm)
Llanta Warlock cromada (83x56mm)



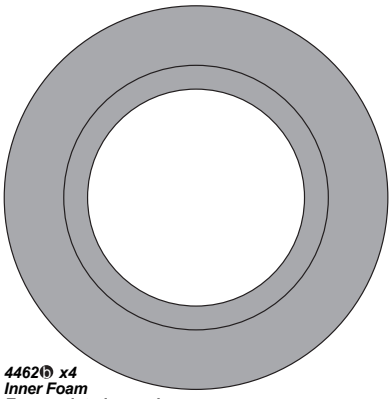
4462ⓐ x4
GT2 Tires S Compound (160x86mm)
Neumático GT2 compuesto S (160x86mm)



73961 x1
Main Chassis 2.5mm (Left)
Chasis 2,5mm (izq)

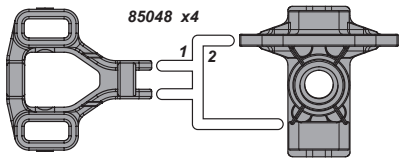


73962 x1
Main Chassis 2.5mm (Right)
Chasis 2,5mm (der)



4462ⓗ x4
Inner Foam
Espuma interior rueda

Z150 x1
Antenna Pipe Set
Tubo antena


85048 x4
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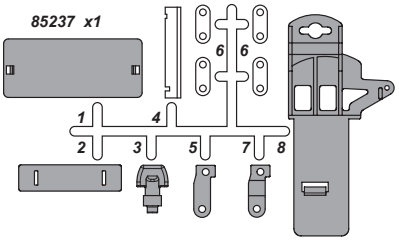
85237 x1
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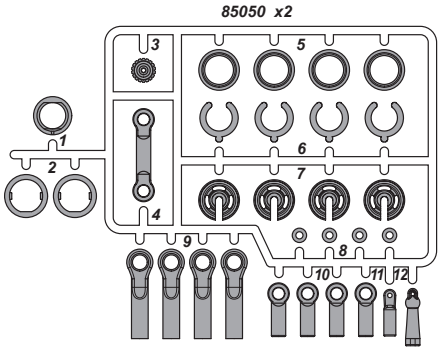
85050 x2
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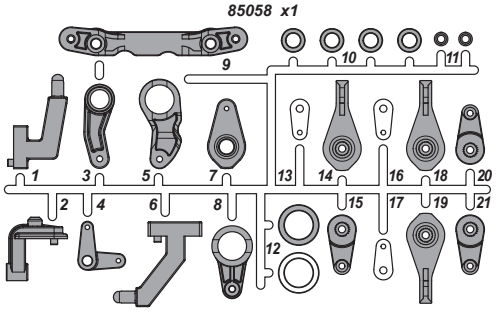
85058 x1
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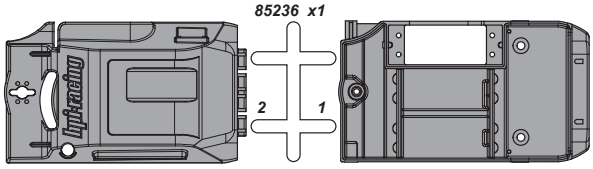
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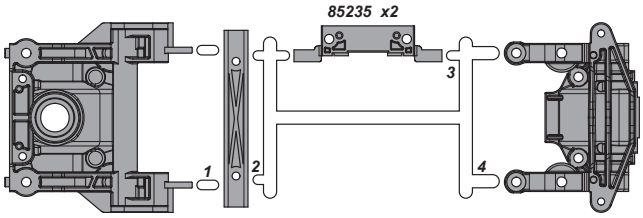
85235 x2
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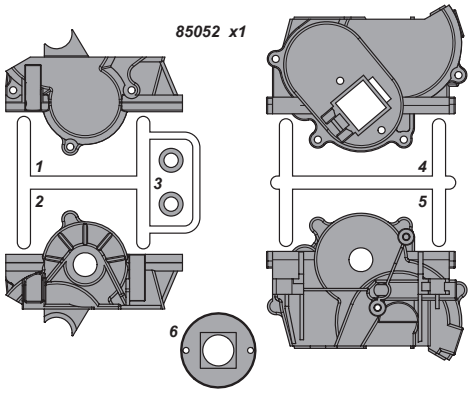
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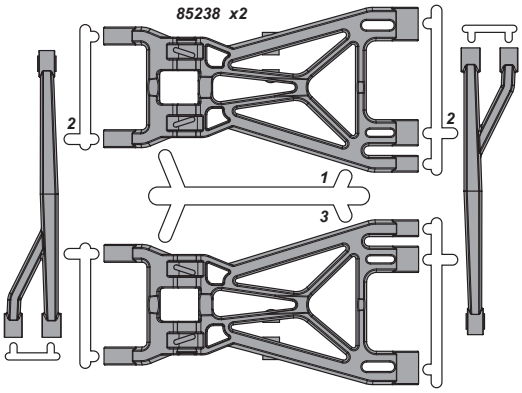
85238 x2
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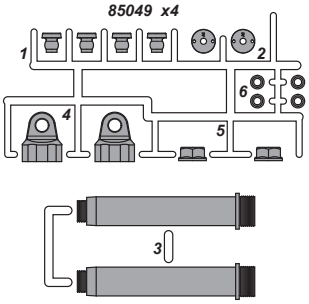
85049 x4
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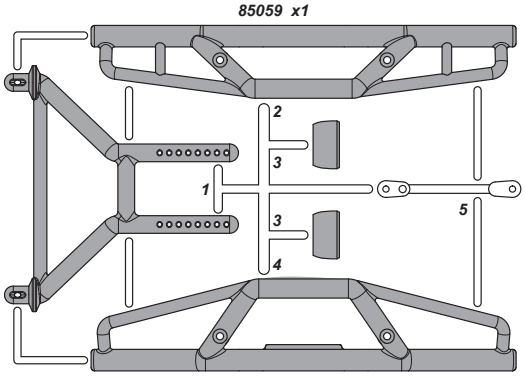
85059 x1
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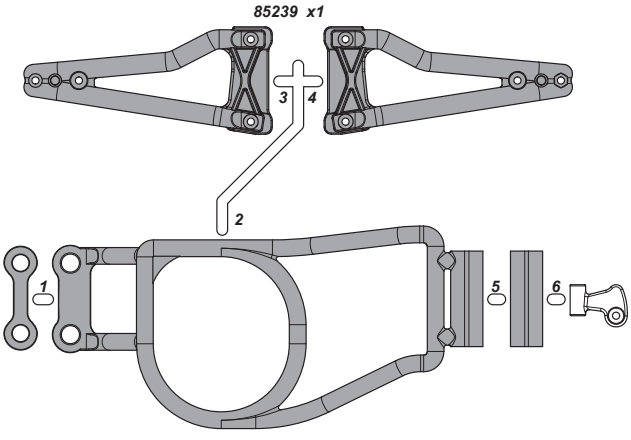
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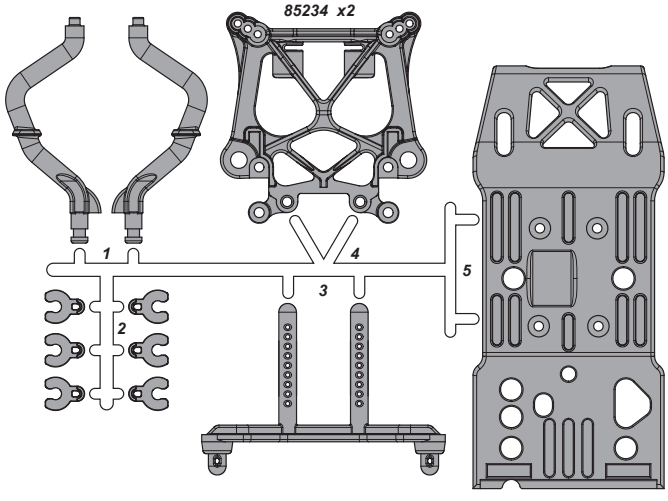
85234 x2
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6-2 Parts List

Parts #	Qty	Description
3192	2	WARLOCK WHEEL CHROME (83x56mm)
4462	2	GT2 TIRES S COMPOUND (160x86mm)
50474	1	SILICONE TUBE 2x5x300mm
6122	10	BODY PIN (MEDIUM)
6123	20	BODY PIN (LARGE/8mm)
6154	10	NYLON STRAP (3.5x150mm/BLACK)
6163	5	SERVO TAPE 20x100mm
6749	4	SHOCK SPRING 14.4x117x1.4mm 26 COILS (BLACK)
6811	8	O-RING 6x9.5x2mm (Black)
6816	6	SILICONE O-RING S10
6819	5	SILICONE O-RING P-3 (RED)
6898	4	SILICONE O-RING P31
72130	1	STAINLESS STEEL SLIPPER PLATE
72131	2	SLIPPER CLUTCH PAD
73961	1	MAIN CHASSIS 2.5mm (SAVAGE X/GRAY/LEFT)
73962	1	MAIN CHASSIS 2.5mm (SAVAGE X/GRAY/RIGHT)
76914	1	TRANSMISSION GEAR 44 TOOTH (1M/2 SPEED)
76924	1	TRANSMISSION GEAR 39 TOOTH (SAVAGE HD 2 SPEED)
76937	1	SPUR GEAR 47 TOOTH (1M)
7782	1	NITRO GT-2 TRUCK PAINTED BODY (BLUE/GRAY/SILVER)
7786	1	NITRO GT-2 TRUCK PAINTED BODY (RED/GRAY/SILVER)
85044	1	DIFF CASE SET
85048	1	UPRIGHT SET
85049	2	SHOCK BODY SET (2 SHOCKS)
85050	2	SHOCK PARTS/ROD END SET (2 SHOCKS)
85058	1	STEERING CRANK/SERVO SAVER SET
85059	1	BUMPER SET/LONG BODY MOUNT SET
86030	1	BEVEL GEAR 43 TOOTH (1M)
86031	1	BEVEL GEAR 13 TOOTH (1M)
86055	2	SHOCK SHAFT 3x86mm (SILVER)
86056	1	DOGBONE 8x84mm (BLACK)
86057	1	DOGBONE 8x78mm (BLACK)
86058	2	DOGBONE 9x123mm (BLACK)
86059	4	BALL 6.8x7.3x3mm (BLACK)
86060	1	ENGINE MOUNT
86061	1	EXHAUST HEADER (REAR EXHAUST)
86064	2	DIFF SHAFT 14x34mm (BLACK)
86065	2	AXLE 8x9x44mm (BLACK)
86066	4	HEX WHEEL HUB 14mm (SILVER)
86067	1	BULKHEAD LOWER PLATE 2.5mm (PURPLE)
86069	1	ENGINE PLATE 2mm (PURPLE)
86070	2	LOWER ARM BRACE 4x54x3mm (PURPLE)
86071	2	FLANGE SHAFT 4x62mm (BLACK)
86073	2	SHAFT 4x78mm (SILVER)
86074	2	SHAFT 4x46mm (SILVER)
86076	1	PILOT NUT 1/4-28X8.5mm (BLACK)
86077	1	COLLET 7x6.5mm (BRASS/21 SIZE)
86081	1	GEAR SHAFT 6x12x78mm (BLACK)
86082	2	CUP JOINT 6x13x20mm (BLACK)
86083	2	CUP JOINT 8x19mm (BLACK)
86084	1	DRIVE GEAR 32 TOOTH (1M)
86087	1	CLUTCH GEAR HOLDER WITH ONE-WAY (SILVER)
86088	1	IDLER SHAFT 6x8x45mm (BLACK)
86089	1	DRIVE SHAFT 6x71mm (BLACK)
86090	2	STEERING CRANK POST 6x49mm (BLACK)
86092	1	BRAKE CAM/PISTON SET
86094	6	SCREW SHAFT M4x2x12mm (BLACK)
86095	6	SCREW SHAFT M5x3x18mm (BLACK)
86097	1	DRIVE GEAR 18-23 TOOTH (1M)
86098	1	IDLER GEAR 29 TOOTH (1M)
86099	10	DIFF CASE WASHER 0.7mm
86110	1	TUNED PIPE (COMPOSITE NYLON/SAVAGE)
86121	4	WASHER 5x10x3mm (BRASS)
86130	1	SLIPPER CLUTCH HUB
86171	1	METAL SPACER SET 5x7.5x3mm
86271	1	FLYWHEEL 34mm (3PIN)
86319	1	STEERING POST 12x47mm (PURPLE)
86322	1	CUP JOINT 6x19x21mm
86356	1	BRAKE LINKAGE SET
86368	1	CLUTCH HOLDER (SAVAGE HD 2SPEED/ASSEMBLED/BLACK)
86369	1	CLUTCH HUB (SAVAGE HEAVY DUTY 2 SPEED)
87042	1	SPRING 4.9x8x7mm/WASHER 4.3x10x1.0mm(HEX HOLE) SET
87049	2	SHAPED EXHAUST GASKET (21 SIZE)
87052	2	SILICONE EXHAUST COUPLING 12x18x30mm (Black)
87054	1	EXHAUST MANIFOLD SPRING 3.2x75x0.7mm x56
87055	1	FIBERGLASS BRAKE DISK 19x35x2.5mm (RED)/PLATE SET
87056	1	SPORT SHOCK SET 104-162mm (ASSEMBLED)
87058	8	RUBBER TUBE 3x8x10mm (SHAPED/BLACK)
87149	1	RACING FUEL TANK (160cc/NO PRIMER)
87151	3	PTFE CLUTCH SHOE/SPRING SET
87192	1	4 BEVEL GEAR DIFFERENTIAL SET (ASSEMBLED)
87193	1	4 BEVEL GEAR DIFFERENTIAL CONVERSION SET
87194	4	SHAFT FOR 4 BEVEL GEAR DIFF 4x27mm
87198	1	AIR CLEANER (21+ SIZE)
87199	1	AIR CLEANER SLEEVE SET (FOR #87198)
87204	1	AIR CLEANER FOAM ELEMENT SET (FOR #87198)
87227	1	HEAVY-DUTY TRANSMISSION GEAR 39T SAVAGE 2 SPEED
94036	10	BUTTON HEAD SCREW M2x5mm
A992	1	HEAVY-DUTY CLUTCH BELL 17 TOOTH (1M)
B021	2	BALL BEARING 5x10x4mm
B023	2	BALL BEARING 6x13x5mm
B032	2	BALL BEARING 10x16x5mm
B072	6	METAL BUSHING 5x11x4mm
B085	2	BALL BEARING 8x16x5mm
Z150	1	ANTENNA PIPE SET
Z224	10	WASHER M3x8mm
Z235	4	C CLIP 20mm
Z240	4	C-CLIP 8mm
Z243	10	E CLIP E3mm
Z245	10	E CLIP E5mm
Z260	12	PIN 2.5x12mm
Z280	4	STEP SCREW M3x19mm
Z282	4	STEP SCREW M3x14mm
Z286	6	STEP SCREW 3x20mm
Z288	4	STEP SCREW 4x20mm
Z303	6	CAP HEAD SCREW M3x42mm
Z481	12	TP. BINDER HEAD SCREW M2.6x8mm
Z488	6	TP. FLANGED SCREW M2.6x12mm
Z515	6	BINDER HEAD SCREW M3x5mm
Z517	10	BINDER HEAD SCREW M3x8mm
Z520	6	BINDER HEAD SCREW M3x18mm
Z526	6	FLAT HEAD SCREW M3x8mm
Z530	6	FLAT HEAD SCREW M3x18mm
Z543	6	CAP HEAD SCREW M3x10mm
Z544	6	CAP HEAD SCREW M3x12mm
Z547	6	CAP HEAD SCREW M3x20mm
Z561	6	TP. FLANGED SCREW M3x10mm
Z567	10	TP. BINDER HEAD SCREW M3x10mm
Z569	10	TP. BINDER HEAD SCREW M3x15mm
Z578	10	TP. FLAT HEAD SCREW M3x12mm
Z581	10	TP. FLAT HEAD SCREW M3x18mm
Z613	6	BINDER HEAD SCREW M4x10mm
Z632	6	TP. BINDER HEAD SCREW M4x10mm
Z634	10	TP. BINDER HEAD SCREW M4x15mm
Z644	10	TP. FLAT HEAD SCREW M4x15mm
Z661	4	LOCK NUT M2.6
Z663	6	LOCK NUT M3
Z682	4	FLANGED LOCK NUT M5 (CLOCKWISE/BLACK)
Z684	4	FLANGED LOCK NUT M4
Z685	10	WASHER 2.7x6.7x0.5mm
Z694	10	WASHER M5x10x0.5mm SILVER
Z695	10	WASHER 4x6x0.3mm (SILVER)
Z721	4	SET SCREW M4x4mm
Z725	6	SET SCREW M4x10mm
Z792	6	CAP HEAD SCREW M4x8mm
Z897	6	WASHER 12x18x0.2mm
Z901	1	ALLEN WRENCH 1.5mm
Z903	1	ALLEN WRENCH 2.5mm
Z904	1	ALLEN WRENCH 2.0mm
Z905	1	ALLEN WRENCH 3.0mm
Z960	1	TURNBUCKLE WRENCH

Lista piezas

Ref.	Cant.	Descripción
3192	2	Llanta Warlock cromada (83x56mm)
4462	2	Neumático GT2 compuesto S (160x88mm)
50474	1	Tubo silicona 2x5x300mm
6122	10	Clip carrocería (medio)
6123	20	Clip carrocería (grande/8mm)
6154	10	Brida nylon (3,5x15mm/negra)
6163	5	Cinta servo 20x100mm
6749	4	Muelle amortiguador 14,4x117x1,4mm 26 espiras (negro)
6811	8	Torica 6x9,5x2mm (negra)
6816	6	Torica silicona S10
6819	5	Torica silicona P3 (roja)
6898	4	Torica silicona P31
72130	1	Placa metálica slipper
72131	2	Zapata slipper
73961	1	Chasis 2,5mm (Savage X /Gris/Izq)
73962	1	Chasis 2,5mm (Savage X /Gris/Der)
76914	1	Corona transmisión 44d (1M/2 vel)
76924	1	Corona transmisión 39d (Savage HD 2 vel)
76937	1	Corona 47d (1M)
7782	1	Carrocería Nitro GT2 pintada (azul/gris/plata)
7786	1	Carrocería Nitro GT2 pintada (rojo/gris/plata)
85044	1	Caja diferencial
85048	1	Trapecios superiores
85049	2	Cuerpo amortiguadores (2 amort)
85050	2	Partes amort. /rotulas (2 amort)
85058	1	Partes dirección/salvaservos
85059	1	Parachoques/soportes carrocerías altas
86030	1	Corona 43d (1M)
86031	1	Corona 13d (1M)
86055	2	Eje amortiguadores 3x86mm (plata)
86056	1	Cardan 8x84mm (negro)
86057	1	Cardan 8x78mm (negro)
86058	2	Cardan 9x123mm (negro)
86059	4	Rotula 6,8x7,3x3mm (negro)
86060	1	Soporte motor
86061	1	Codo escape (salida trasera)
86064	2	Vaso diferencial 14x34mm (negro)
86065	2	Vaso con eje 8x9x44mm (negro)
86066	4	Hexágono 14mm (plata)
86067	1	Placa inf.caja trans (púrpura)
86069	1	Soporte motor 2mm (púrpura)
86070	2	Soporte inferior trapecios 4x54x3mm (púrpura)
86071	2	Eje labiado 4x62mm (negro)
86073	2	Eje 4x78mm (plata)
86074	2	Eje 4x46mm (plata)
86076	1	Tuerca embrague 1/4-28x8,5mm (negro)
86077	1	Cono embrague 7x6,5mm (bronce/tam.21)
86081	1	Eje transmisión 6x12x78mm (negro)
86082	2	Vaso transmisión 6x13x20mm (negro)
86083	2	Vaso transmisión 8x19mm (negro)
86084	1	Corona transmisión 32d (1M)
86087	1	Soporte embrague con One way (plata)
86088	1	Eje intermedio 6x8x45mm (negro)
86089	1	Eje intermedio 6x71mm (negro)
86090	2	Soporte dirección 6x49mm (negro)
86092	1	Leva/pistón freno
86094	6	Eje roscado M4x2x12mm (negro)
86095	6	Eje roscado M5x3x18mm (negro)
86097	1	Corona transmisión 18-23d (1M)
86098	1	Piñon intermedio 29d (1M)
86099	10	Junta caja diferencial 0,7mm
86110	1	Escape (composite nylon/Savage)
86121	4	Arandela 5x10x3mm (latón)
86130	1	Soporte slipper
86171	1	Separador metálico 5x7,5x3mm
86271	1	Volante embrague 34mm (3patas)
86319	1	Soporte dirección 12x47mm (púrpura)
86322	1	Vaso transmisión 6x19x21m
86356	1	Varillaje freno
86368	1	Soporte embrague (Savage HD 2 vel/montado/negro)
86369	1	Arrastre embrague (Savage HD 2 vel)
87042	1	Muelle 4,9x8x7mm/arandela 4,3x10x1,0 (hex)
87049	2	Junta escape (tipo 21)
87052	2	Junta unión escape 12x18x30mm (negro)
87054	1	Muelle escape 3,2x75x0,7mmx56
87055	1	Disco freno fibra 19x35x2,5mm (rojo)/placas freno
87056	1	Amortiguadores Sport montados 104-162mm
87058	8	Tubo goma 3x8x10mm (negro)
87149	1	Deposito combustible (160cc sin cebador)
87151	3	Zapatas embrague teflon/muelles
87192	1	Diferencial 4 satélites (montado)
87193	1	Conversión a diferencial 4 satélites
87194	4	Eje para diferencial 4 satélites
87198	1	Filtro de aire (tipo 21)
87199	1	Soporte filtro aire (para 87198)
87204	1	87204 Set elementos foam para filtro aire (para 87198)
87227	1	Transmisión reforzada 39d /cambio 2 vel.
94036	10	Tornillo cabeza botón M2x5mm
A992	1	Campana embrague reforzada 17d (1M)
B021	2	Rodamiento 5x10x4mm
B023	2	Rodamiento 6x13x5mm
B032	2	Rodamiento 10x16x5mm
B072	6	Casquillo metálico 5x11x4mm
B085	2	Rodamiento 8x16x5mm
Z150	1	Antena
Z224	10	randela M3x8mm
Z235	4	C-Clip 20mm
Z240	4	C-Clip 8mm
Z243	10	E-Clip E3mm
Z245	10	E-Clip E5mm
Z260	12	Pasador 2,5x12mm
Z280	4	Tornillo con vástago M3x19mm
Z282	4	Tornillo con vástago M3x14mm
Z286	6	Tornillo con vástago 3x20mm
Z288	4	Tornillo con vástago 4x20mm
Z303	6	Tornillo cabeza redonda M3x42
Z481	12	Tornillo autorros. cabeza redonda M2,6x8mm
Z488	6	Tornillo autorros. con arandela M2,6x12mm
Z515	6	Tornillo cabeza redonda M3x5mm
Z517	10	Tornillo cabeza redonda M3x8mm
Z520	6	Tornillo cabeza redonda M3x18mm
Z526	6	Tornillo avellanado M3x8mm
Z530	6	Tornillo avellanado M3x18mm
Z543	6	Tornillo cabeza cilíndrica M3x10
Z544	6	Tornillo cabeza cilíndrica M3x12mm
Z547	6	Tornillo cabeza cilíndrica M3x20mm
Z561	6	Tornillo autorros. con arandela M3x10mm
Z567	10	Tornillo autorros. cabeza redonda M3x10mm
Z569	10	Tornillo autorros. cabeza redonda M3x15mm
Z578	10	Tornillo autorros. avellanado M3x12mm
Z581	10	Tornillo autorros. avellanado M3x18mm
Z613	6	Tornillo cabeza redonda M4x10mm
Z632	6	Tornillo autorros. cabeza redonda M4x10mm
Z634	10	Tornillo autorros. cabeza redonda M4x15mm
Z644	10	Tornillo autorros. avellanado M4x15mm
Z661	4	Tuerca autoblocante M2,6
Z663	6	Tuerca autoblocante M3
Z682	4	Tuerca alveolada M5 (rosca normal/negra)
Z684	4	Tuerca autoblocante alveolada M4
Z685	10	Arandela 2,7x6,7x0,5mm
Z694	10	Arandela M5x10x0,5mm (plata)
Z695	10	Arandela 4x6x0,3mm (plata)
Z721	4	Allen M4x4mm
Z725	6	Allen M4x10mm
Z792	6	Tornillo cabeza cilíndrica M4x8mm
Z897	6	Arandela 12x18x0,2mm
Z901	1	Llave allen 1,5mm
Z903	1	Llave allen 2,5mm
Z904	1	Llave allen 2,0mm
Z905	1	Llave allen 3,0mm
Z960	1	Llave tirantes suspensión

6-3 Option Parts List

Parts #	Qty	Description
1436	1	ALUMINUM HEAT SINK HEAD (PURPLE/11FIN)
1438	1	"CHUBBY" ALUMINUM HEAT SINK HEAD 60 x 46mm (PURPLE)
15201	1	NITRO STAR K4.6 ENGINE WITH PULLSTART
2012	1	HUMP BATTERY PACK FOR RECEIVER (6V 1200mAh/Ni-MH)
3005	2	GT5 WHEEL WHITE (83x56mm)
3006	2	GT5 WHEEL BLACK (83x56mm)
3007	2	GT5 WHEEL CHROME (83x56mm)
3008	2	GT5 WHEEL GRAY (83x56mm)
3011	2	Q6 WHEEL WHITE (83x56mm)
3012	2	Q6 WHEEL BLACK (83x56mm)
3013	2	Q6 WHEEL CHROME (83x56mm)
3018	2	Q6 WHEEL GUNMETAL (83x56mm)
307	1	REVERSE MIXER PRO
3115	2	6 SPOKE WHEEL WHITE (83x56mm)
3116	2	6 SPOKE WHEEL BLACK (83x56mm)
3117	2	6 SPOKE WHEEL SHINY CHROME (83x56mm)
3119	2	6 SPOKE WHEEL MATTE CHROME (83x56mm)
3135	2	8 SPOKE WHEEL WHITE (83x56mm)
3136	2	8 SPOKE WHEEL BLACK (83x56mm)
3139	2	8 SPOKE WHEEL MATTE CHROME (83x56mm)
3161	2	6 SPOKE WHEEL BLACK CHROME (83x56mm)
3173	2	8 SPOKE WHEEL BLACK CHROME (83x56mm)
3190	2	WARLOCK WHEEL WHITE (83x56mm)
3191	2	WARLOCK WHEEL BLACK (83x56mm)
4464	2	GT TIRES S COMPOUND (160x86mm)
4667	2	INNER FOAM 30x80x255mm (FIRM)
4852	2	DIRT BONZ TIRE S COMPOUND (150x83mm)
4874	2	DIRT CLAWS TIRE B COMPOUND (145x84mm)
4925	2	MOUNTED NUBZ TIRE 143x68mm S COMPOUND on DISH WHEEL WHITE
4926	2	MOUNTED NUBZ TIRE 143x68mm S COMPOUND on DISH WHEEL BLACK
4928	2	MOUNTED NUBZ TIRE 143x68mm S COMPOUND on DISH WHEEL YELLOW
6743	4	SHOCK SPRING 14.4x117x1.2mm 25 COILS (RED)
6744	4	SHOCK SPRING 14.4x118x1.2mm 23.5COILS(GREEN)
6745	4	SHOCK SPRING 14.4x117x1.3mm 26 COILS (BLUE)
6746	4	SHOCK SPRING 14.4x117x1.4mm 26COILS (PURPLE)
73070	1	ARM BRACE SET (WOVEN GRAPHITE/UPPERx2/LOWERx4)
73818	1	TVP CHASSIS GRAPHITE 3mm
73915	1	MAIN CHASSIS 2.5mm (BLUE)
73916	1	MAIN CHASSIS 2.5mm (GOLD)
73918	1	MAIN CHASSIS 2.5mm (PURPLE)
73919	1	SUPER TVP CHASSIS 2.5mm SET (7075S/GRAY)
73935	2	FLAMED TVP CUSTOM CHASSIS (PURPLE/BLACK)
73938	2	FLAMED TVP CUSTOM CHASSIS (SILVER/BLUE)
77103	1	RACING CLUTCH BELL 13 TOOTH (1M)
77104	1	RACING CLUTCH BELL 14 TOOTH (1M)
77105	1	RACING CLUTCH BELL 15 TOOTH (1M)
77106	1	RACING CLUTCH BELL 16 TOOTH (1M)
77107	1	RACING CLUTCH BELL 17 TOOTH (1M)
77108	1	RACING CLUTCH BELL 18 TOOTH (1M)
77109	1	RACING CLUTCH BELL 19 TOOTH (1M)
77110	1	RACING CLUTCH BELL 20 TOOTH (1M)
80587	1	SF-2/SERVO METAL GEAR CONVERSION SET
80844	2	MIP CVDS (DRIVE AXLE/BLACK)
80847	2	MIP CENTER DRIVE CVDS (BLACK)
85066	1	ADJUSTABLE UPPER ARM SET
85068	1	SAFETY ENGINE STOP SYSTEM
85245	1	WHEELIE BAR SET FOR SAVAGE
86127	1	GEAR DIFF SET 43T (ASSEMBLED)
86134	2	HEAVY-DUTY DOGBONE 9x123mm (SILVER)
86136	1	ALUMINUM DRIVE GEAR 18-23TOOTH (1M)
86139	1	ALUMINUM TUNED PIPE (PURPLE/21+)
86140	1	HEAT SINK ENGINE MOUNT (7075S)
86141	1	EXHAUST HEADER (OS 21RG(P)-X ENGINE/SAVAGE)
86142	1	ALUMINUM HEX WHEEL HUB (14mm/CLAMP TYPE/PURPLE)
86151	1	HEAVY-DUTY DOGBONE 8x77mm (SILVER)
86152	1	HEAVY-DUTY DOGBONE 8x83mm (SILVER)
86156	4	HEAVY-DUTY SUSPENSION SHAFT 4x62mm
86186	1	RIBBED TUNED PIPE (BLACK/21+)
86187	1	RIBBED TUNED PIPE (PURPLE/21+)
86188	1	RIBBED TUNED PIPE (SILVER/21+)
86251	1	ALUMINUM UPRIGHT SET (PURPLE/LEFT AND RIGHT)
86254	2	ALUMINUM C HUB (PURPLE)
86256	2	ALUMINUM LOWER SUSPENSION ARM (PURPLE)
86257	2	ALUMINUM ADJUSTABLE UPPER ARM (PURPLE)
86269	1	UNIVERSAL DOGBONE 8x87mm
86270	1	UNIVERSAL DOGBONE 8x93mm
86274	1	LIGHT WEIGHT DRIVE GEAR 32TOOTH (1M)
86275	1	LIGHT WEIGHT IDLER GEAR 29TOOTH (1M)
86276	2	HEAVY-DUTY CUP JOINT 6x13x20mm (SILVER)
86277	2	HEAVY-DUTY CUP JOINT 8x14x19mm (SILVER)
86278	2	HEAVY-DUTY DIFF SHAFT 14x34mm (SILVER)
86343	1	TITANIUM GEAR SHAFT 6x12x78mm
86344	1	TITANIUM IDLER SHAFT 6x8x45mm
86345	1	TITANIUM DRIVE SHAFT 6x67mm
86346	1	ALUMINUM FUEL TANK MOUNT (PURPLE)
86386	2	ALUMINUM JOINT BAR (PURPLE)
86399	1	HEAVY DUTY HEATSINK ENGINE MOUNT (6061S/PURPLE)
87032	1	REVERSE MODULE (SAVAGE)
87039	1	REVERSE MODULE WITH MIXER (SAVAGE X)
87150	1	DUAL DISK BRAKE SET (STAINLESS STEEL)
87196	1	ALUMINUM CLUTCH SHOE SET (3 PIECE TYPE)
87218	1	3 SPEED TRANSMISSION FOR SAVAGE (ASSEMBLED)
87220	1	3 SPEED TRANSMISSION FOR SAVAGE
87229	1	17mm HEX HUB CONVERSION SET (SAVAGE)
87230	1	17mm HEX HUB CONVERSION SET w/UV JOINT (SAVAGE)
87232	1	NUBZ CONVERSION SET w/17mm AXLES (SAVAGE) WHITE
87233	1	NUBZ CONVERSION SET w/17mm UV JOINTS (SAVAGE) WHITE
87234	1	UNIVERSAL JOINT FOR 17mm HEX HUB CONVERSION SET
87239	2	UNIVERSAL JOINT 9x162mm (PAIR)
87248	1	SAVAGE LOW CG RACING CHASSIS SET
93585	2	TURNBUCKLE M4x70mm (TITANIUM/PURPLE)
A712	8	ALUMINUM THREADED SHOCK SET (104-162mm)
A988	1	HEAVY-DUTY CLUTCH BELL 13 TOOTH (1M)
A989	1	HEAVY-DUTY CLUTCH BELL 14 TOOTH (1M)
A991	1	HEAVY-DUTY CLUTCH BELL 16 TOOTH (1M)
A992	1	HEAVY-DUTY CLUTCH BELL 17 TOOTH (1M)
A994	1	HEAVY-DUTY CLUTCH BELL 19 TOOTH (1M)
B045	1	STEERING UPGRADE SET (6x10x3mm BALL BEARING)

6-3 Piezas opcionales

Ref.	Cant	Descripción
1436	1	CULATA REFRIGERADORA ALUMINIO (PÚRPURA /11 ALETAS)
1438	1	CULATA REFRIGERADORA "CHUBBY" 60X46MM (PÚRPURA)
15201	1	MOTOR NITRO STAR K4,6 CON TIRADOR
2012	1	BATERÍA ALTA CAPACIDAD (6V-1200 MAH)
3005	2	LLANTA GT5 BLANCA (83X56MM)
3006	2	LLANTA GT5 NEGRA (83X56MM)
3007	2	LLANTA GT5 CROMADA (83X56MM)
3008	2	LLANTA GT5 GRIS (83X56MM)
3011	2	LLANTA Q6 BLANCA (83X56MM)
3012	2	LLANTA Q6 NEGRA (83X56MM)
3013	2	LLANTA Q6 CROMADA (83X56MM)
3018	2	LLANTA Q6 GRIS (83X56MM)
307	1	MEZCLADOR MARCHA ATRÁS PRO
3115	2	LLANTA 6 BRAZOS BLANCA (83X56MM)
3116	2	LLANTA 6 BRAZOS NEGRA (83X56MM)
3117	2	LLANTA 6 BRAZOS CROMO BRILLANTE (83X56MM)
3119	2	LLANTA 6 BRAZOS CROMO MATE (83X56MM)
3135	2	LLANTA 8 BRAZOS BLANCA (83X56MM)
3136	2	LLANTA 8 BRAZOS NEGRA (83X56MM)
3139	2	LLANTA 8 BRAZOS CROMO MATE (83X56MM)
3161	2	LLANTA 6 BRAZOS CROMO NEGRO (83X56MM)
3173	2	LLANTA 8 BRAZOS CROMO NEGRO (83X56MM)
3190	2	LLANTA WHARLOCK BLANCA (83X56MM)
3191	2	LLANTA WHARLOCK NEGRA (83X56MM)
4464	2	NEUMÁTICO GT COMPUESTO S (160X86MM)
4667	2	ESPUMA INTERIOR DURA 30X80X255MM
4852	2	NEUMÁTICO DIRT BONZ COMPUESTO S (150X83MM)
4874	2	NEUMÁTICO DIRT CLAWS COMPUESTO B (145X84MM)
4925	2	NEUMÁTICO NUBZ 143X68MM COMP.S MONTADOS /LLANTA AERODISCO BLANCA
4926	2	NEUMÁTICO NUBZ 143X68MM COMP.S MONTADOS /LLANTA AERODISCO NEGRA
4928	2	NEUMÁTICO NUBZ 143X68MM COMP.S MONTADOS /LLANTA AERODISCO AMARILLA
6743	4	MUELLE AMORT. 14,4X117X1,2MM 25 ESPIRAS (ROJO)
6744	4	MUELLE AMORT. 14,4X118X1,2MM 23,5 ESPIRAS (VERDE)
6745	4	MUELLE AMORT. 14,4X117X1,3MM 26 ESPIRAS (AZUL)
6746	4	MUELLE AMORT. 14,4X117X1,4MM 26 ESPIRAS (PÚRPURA)
73070	1	REFUERZOS TRAPECIOS (CARBONO /2 SUP/ 4 INF)
73818	1	CHASIS TVP GRAFITO 3MM
73915	1	CHASIS 2,5MM (AZUL)
73916	1	CHASIS 2,5MM (DORADO)
73918	1	CHASIS 2,5MM (PÚRPURA)
73919	1	CHASIS TVP 2,5 (7075S/GRIS)
73935	2	CHASIS CUSTOM LLAMEANTE TVP (PÚRPURA/NEGRO)
73938	2	CHASIS CUSTOM LLAMEANTE TVP (PLATA/AZUL)
77103	1	CAMPANA EMBRAGUE RACING 13D (1M)
77104	1	CAMPANA EMBRAGUE RACING 14D (1M)
77105	1	CAMPANA EMBRAGUE RACING 15D (1M)
77106	1	CAMPANA EMBRAGUE RACING 16D (1M)
77107	1	CAMPANA EMBRAGUE RACING 17D (1M)
77108	1	CAMPANA EMBRAGUE RACING 18D (1M)
77109	1	CAMPANA EMBRAGUE RACING 19D (1M)
77110	1	CAMPANA EMBRAGUE RACING 20D (1M)
80587	1	PIÑONERIA METÁLICA SERVO SF-2
80844	2	CARDAN CVDS MIP (EJE NEGRO)
80847	2	CARDAN CENTRAL CVDS MIP (NEGRO)
85066	1	TRAPECIOS SUPERIORES AJUSTABLES
85068	1	SISTEMA PARO DE SEGURIDAD DEL MOTOR
85245	1	BARRA "WHEELIE" PARA SAVAGE
86127	1	DIFERENCIAL 43D (MONTADO)
86134	2	CARDAN REFORZADO 9X123MM (PLATA)
86136	1	PIÑÓNES ALUMINIO 18X23D (1M)
86139	1	ESCAPE ALUMINIO (PÚRPURA/21+)
86140	1	SOPORTE REFRIGERADOR MOTOR (7075S)
86141	1	CODO SALIDA ESCAPE (OS 21RG(P)- MOTOR X SAVAGE
86142	1	HEXÁGONO RUEDAS ALUMINIO (AJUSTABLE/14MM/PÚRPURA)
86151	1	CARDAN REFORZADO 8X77MM (PLATA)
86152	1	CARDAN REFORZADO 8X83MM (PLATA)
86156	4	EJES SUSPENSIÓN REFORZADOS 4X62MM
86186	1	ESCAPE ALUMINIO RIBETEADO (NEGRO/21+)
86187	1	ESCAPE ALUMINIO RIBETEADO (PÚRPURA/21+)
86188	1	ESCAPE ALUMINIO RIBETEADO (PLATA/21+)
86251	1	SOPORTE TRAPECIOS SUPERIORES ALUMINIO (PÚRPURA/IZQ DER)
86254	2	PORTAMANGUETAS ALUMINIO (PÚRPURA)
86256	2	TRAPECIO INFERIOR ALUMINIO (PÚRPURA)
86257	2	TRAPECIO SUPERIOR AJUSTABLE (PÚRPURA)
86269	1	CARDAN UNIVERSAL 8X87MM
86270	1	CARDAN UNIVERSAL 8X93MM
86274	1	CORONA ALIGERADA 32D (1M)
86275	1	PIÑON INTERMEDIO ALIGERADO 29D (1M)
86276	2	VASO TRANSMISIÓN REFORZADO 6X13X20MM (PLATA)
86277	2	VASO TRANSMISIÓN REFORZADO 8X14X19MM (PLATA)
86278	2	VASO DIFERENCIAL REFORZADO 14X34MM (PLATA)
86343	1	EJE TRASMISIÓN TITANIO 6X12X78MM
86344	1	EJE INTERMEDIO TRANSMISIÓN 6X8X45MM
86345	1	EJE TRANSMISIÓN TITANIO 6X67MM
86346	1	SOPORTE ALUMINIO DEPOSITO COMBUSTIBLE (6061S/PÚRPURA)
86386	2	UNIONES ALUMINIO CHASIS PÚRPURA
86399	1	BANCADA MOTOR REFORZADA Y REFRIGERADA
87032	1	MODULO MARCHA ATRÁS (SAVAGE)
87039	1	MODULO MARCHA ATRÁS CON MEZCLADOR (SAVAGE X)
87150	1	SISTEMA DOBLE FRENO (ACERO)
87196	1	ZAPATAS EMBRAGUE ALUMINIO (TIPO 3 ZAPATAS)
87218	1	CAMBIO 3 VELOCIDADES PARA SAVAGE (MONTADO)
87220	1	CAMBIO 3 VELOCIDADES PARA SAVAGE
87229	1	CONVERSIÓN HEXÁGONO 17MM (SAVAGE)
87230	1	CONVERSIÓN HEXÁGONO 17MM CON CARDAN (SAVAGE)
87232	1	CONVERSIÓN NUBZ CON HEX.17MM/EJES (SAVAGE) BLANCO
87233	1	CONVERSIÓN NUBZ CON HEX.17MM/CARDAN (SAVAGE) BLANCO
87234	1	PALIER PARA SET CONVERSION 17MM
87239	2	CARDAN 9X162MM (PAR)
87248	1	CHASIS LARGO / BAJO CDG RACING SAVAGE
93585	2	TIRANTES SUSPENSIÓN AJUSTABLES M4X70MM (TITANIO/PÚRPURA)
A712	8	CUERPO AMORTIGUADORES ROSCADOS (104-162MM)
A988	1	CAMPANA EMBRAGUE REFORZADA 13D (1M)
A989	1	CAMPANA EMBRAGUE REFORZADA 14D (1M)
A991	1	CAMPANA EMBRAGUE REFORZADA 16D (1M)
A992	1	CAMPANA EMBRAGUE REFORZADA 17D (1M)
A994	1	CAMPANA EMBRAGUE REFORZADA 19D (1M)
B045	1	MODIFICACIÓN DIRECCIÓN (RODAMIENTOS 6X10X3)

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